Journal of Accountancy, September 1934 Vol. 58 Issue 3 [whole issue from bound volume]

American Institute of Accountants

The JOURNAL *of* ACCOUNTANCY

Official Organ of the AMERICAN INSTITUTE OF ACCOUNTANTS

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VOL. 58 SEPTEMBER, 1934 No. 3

EDITORIAL

Lest We Forget

When we are being told to look forward and to ignore the past, it is high time to display a little independence of action and of thought and to look backward. No great accomplishment is possible when one knows not the ground upon which he stands. We are all so very much distressed in mind and estate that we are apt to listen too readily to the vague admonitions of false prophets. America is part of a new world, and consequently the people of America are much too prone to believe in the new and to repudiate the old. Every part of the new world was explored and settled by adventurers, some of whom were animated by the pure love of adventure itself, but chiefly the colonists were men and women who had escaped with nothing but their own innate abilities. There was little wealth among them, and the value of things was deeply impressed upon their mentality. Every colony which achieved success in the after years was founded on the principle of thrift. Every language is filled with proverbs of the virtue of thrift. It is essential in our national thought. In America the greatest material success arose upon the foundations laid by people who had to consider the value and the purchasing power of every shilling or penny. The traditional Yankee, like the traditional Scot, wanted and still wants full value for the money which he saved by honest sweat and aching muscles. The dollar earned by labor on farm or in factory or shop deserves the respect of the earner. So Americans of the old stock have been almost universally a thrifty or even a parsimonious folk. Through all the adolescent period of America's life we have been a saving people. Now we are being advised to forget the elemental values and to set out on a new path, which starts nowhere, leads through nothing and will end God knows where. If we had not forgotten that the world had a history we should perhaps remember that after nations grow and prosper, they pass into times of crucial hardship. Then, if they forget the rock whence they were hewn, they almost always decline. If there were a remembrance of history we should recall the fate of Egypt and Carthage and Greece and Rome and Spain and should be more careful lest we who have been so richly blessed should follow the course of the almost forgotten world powers.

At the Green Baize Table

We grew up rapidly and everything we touched seemed to turn to gold, but still the old spirit of thrift did not die. Here and there was wild extravagance, but for the most part Americans have always been, in good times and bad, a saving people. At least it was so until 1914. Then came the war and its aftermath, and we went stark mad. The new era of everlasting values and constantly growing profits deceived many of us. We spoke in terms of the future. We were never to go back to the days when a dollar was merely a dollar. At last came the inevitable crash. We lost our heads completely and cried aloud for change. So we abandoned our new era and pinned our faith in a new deal—a phrase based upon the throw of the cards. In other words, we were to reshuffle and redeal and hope that fate would give each of us a good hand. People seem to have overlooked the significance of the phraseology of gambling. America at heart is not a nation which cares to entrust its prosperity to any such uncertain governance, and we still believe, in spite of all the ill omens, that some day we shall return to a more sane method of selecting our path to fortune. The whole world went out after strange gods, any gods that would promise a change, but here in America we carried the experiment further than any other important nation. We had come into the reckless age of youngmanhood and were willing to throw away what our fathers had won, not by dealing cards but by thought, act, labor and prayer. In the course of the changing theories we called in callow youths with diplomas and doctors' degrees and gave them subordinate command. They knew nothing except what they had evolved in their crescent minds. Their experience was nothing worth. They decided that we should do all the things which our forefathers had declared to be unwise—somewhat like most of the people during the lamentable era of prohibition, when to drink was the chief ambition, because drinking was forbidden. These young experimentalists decided that thrift was an outworn formula. The thing to do now was to spend and to spend again. There was little left to spend, so they ordained that we should decrease the worth of our money, on some strange notion that by raising prices we should attain prosperity. We were taught by these confident advisors that it would be well to spend whatever we could find to spend, particularly because money was not worth much any way.

America—Spendthrift Extraordinary

Hard times threw countless men and women out of work and the simplest and easiest way of providing for those who were destitute from no fault of their own was to appropriate huge sums and distribute them magnificently without thinking at all of where those sums could be raised. What was a mere thirty or forty billion dollars when men were hungry? So again we departed from the fundamental conception of thrift; and we distributed, to the deserving and the undeserving alike, money or food or fuel to meet the urgent demands of ten million people. There were many careful thinkers who could not bring themselves to advocate any other means of providing for the needy. The experience of Great Britain with its dole was before us, but we were not prevented by that unhappy spectacle of fallacy. We were led by some evil genius to spend what we did not possess. Of course, it would be ridiculous to argue that people should be allowed to starve when there is anything with which to feed them. But that is not to admit that there has been or is any excuse whatever for lavish gratuity. We have destroyed enormous quantities of grain and cattle and swine; we have plowed in fertile acres of cotton; we have cut down production while people were in want—and we have done it all because some immature economist believed that while we had an abundance we should never have prosperity. The spirit of thriftlessness was abroad in government, and the horrid example of wicked waste was held up before us as the ideal solution of all our problems. In harmony with what might be called the economy of destruction we took that easy, simple course of free distribution in return for nothing whatever. If our wise young men who are now so potent in the councils of the land had not forgotten their history—if they ever knew it—they could call to mind the dictum which controlled in the early affairs of Virginia, that he who would not work should not eat. If men and women are to be housed, clothed and fed and supplied with pocket money, they should be required to give an honest day's work for every day's pay, whatever form that pay may take. The incapable are in a different category, but they are a very small minority of the beneficiaries of experimental extravagance. The air is full of authentic stories of men refusing to work when work was offered because they could derive an even greater income by sitting down at the door of the distributor of the dole. In these people the basic American principle of honesty is being destroyed. They prefer to do nothing and to have some one else pay the bills. This is not a matter for astonishment. It is the logical, inevitable outcome of pauperizing a people.

Payment Must Be Made Some Day

No one yet has decided how the bill is to be paid. The spirit of inquiry is growing, however, and hundreds of men who have experience and have the right to some opinion stand aghast at the prospect. They all say something of the same kind. For purposes of illustration let us quote a report of a speech delivered by Orval W. Adams, published in *The American Bankers Association Journal.* Mr. Adams urges that the country stop petitions for public improvement far beyond our means to afford, realize that we can not solve our problems of governmental finance by easy expedients and admit that nothing can replace collective thrift. "The government," he says, "and all its political subdivisions under which we live are spending annually $14,700,000,000, which represents approximately 37 per cent. of our total national income. While this is far beyond our ability even to estimate or imagine, this thing we can understand: that it is far beyond our ability to meet. How and when shall we bring all our power, concentrate all our intelligence to call a halt to such wild abandon? But that is only half the picture. While we are spending $14,700,000,000 to meet the obligations of government, we are paying out of our current taxes only $7,975,000,000 annually. What of the balance? That is the legacy which we are transferring to the future generations as an impressive evidence of our solicitude for their well being."

Destroying the Dignity of Labor

Now, while we are pampering the people who do not wish to work and endeavoring to cajole others to work on worthless projects—especially on the eve of national elections—we are going merrily along, hoping that something will turn up which will save us from ultimate disaster. We have destroyed in large part the honor of work. The man who works—so runs the story—is a fool, while the government pays for idleness. It would be more correct to say while the government makes those who work pay for idleness. We know not what dire fate it is that seems to hold the sword above our heads. We are, of course, in a perplexed and uncertain state, but surely the way out does not lie along new untrodden paths. Far better if we would go back to the experiences of the past and save America as America has been saved before. Let us feed and clothe and house those who can not help themselves; but, when that has been done, let us insist that he who will not work when work is available shall not eat. That is not primitive cruelty. It is merely the kindest way to treat a misguided group of people. The fact that they have been misguided is not altogether their fault. If business were allowed to pursue its natural course without tedious and troublesome acts of interference by an experimental government, there would be much more work than there is today. The rest of the world is coming up out of the depression; yet we still wallow in the depths. Various estimates of the amount of unnecessary waste during the past eighteen months have been made by statisticians and other folk, but no one knows the actual amount. To begin with, no one knows the value of the dollar. So how can we know how much true value has been wasted when we have nothing by which to measure it? However, it is certain that the sum is colossal, and it is equally certain that if we are to retain any of our self respect as a nation we must pay the bill.

Two Ways—but Only One Can Save Us

Two ways have been suggested—and there seem to be no others. Either we must pay our bills by taxing to the point of confiscation every owner of any asset or income or we must further repudiate our integrity and start the printing presses turning out greenbacks which will represent nothing more than examples of fine etching or typography. It is noteworthy that the first of these expedients is the one generally favored by those who will have to pay the taxes, and that in itself speaks well for the latent honor of Americans. The proponents of inflation are almost exclusively found in the ranks of those who have never done much for the welfare of mankind and have never achieved success except in imagination. One of these two methods of escape must be taken. May heaven forbid that we fall into the tragic error of a further reduction of the value of the dollar. The taxes which will be required to meet the cost of the terrible experiments of recent months will be paid ultimately, and we shall have to grin and bear it. Great Britain struggled through, carrying an almost unbearable load, and we can do as much. There is nothing gained by crying about it. What we can do now is to insist that the orgy of expenditure shall cease. The protest arises on all sides. The incomprehensible blindness of the advocates of inflation is appalling. They love to talk of controlled inflation. Can any one who knows history point to a single case where inflation was tried and checked before it led to disaster? We are not wiser than the rest of the world, and we can not hope to succeed in a dangerous adventure in which every one else has failed. Inflation would be the last phase of our downward flight from monetary stability. If we start the printing presses at work supplying something that looks like but is not money we shall strike another mortal blow at the spirit of thrift, which more than anything else has made America great.

Inflation Could Destroy Us

The stump orators who proclaim the merits of inflation say that a dollar is a dollar, and whether it have little or great value in the markets of the world is unimportant. Well, here are some of the things which will follow if we have further inflation. All costs and prices will advance more rapidly than the flow of manufactured money. This is the invariable experience. Wages and salaries will advance, but much more slowly. Fixed incomes will still be paid in dollars and the number of dollars so paid will not increase. Consequently every insurance company, every eleemosynary institution will find its revenues the same in appearance but pitifully less in effect. Organizations which depend upon dues will not be able to increase their revenues, but the effective operation of the organizations will be destroyed, because the revenues will have practically no purchasing power. The old theory that gilt-edged securities were proper investments for trust funds must be cast aside, because under inflation a government bond becomes the most speculative medium of investment. The smaller the yield on a security the greater the gamble. Three per cent. bonds will be worth a fraction, a very minute fraction, of one per cent. so far as income is concerned.

The Terrible Record of Inflation

We wish that every one would read a report prepared for the Duke Endowment, of North Carolina, by Philip G. Wright. The report is entitled *Inflation and After*. It would edify our fiercely vocal inflationists to know that the savings banks of Germany lost $99\frac{9}{10}$ per cent. of their deposits as a result of inflation, and depositors who did leave their money in the banks lost virtually all their savings. We have not the space to quote many of the statements which the report contains but a few paragraphs call for repetition. Speaking of conditions on the continent of Europe the report says, "During the latter stages of inflation it often happened that the insurance money paid in settlement of death claims was worth no more than a few cents of American money." Again, "Inflation brought the German life-insurance companies closer to ruin than the extraordinary increase in death claims that resulted from the world war. The companies lost 93.5 per cent. of their assets, 79.8 per cent. of the number of policies outstanding and 95.6 per cent. of their investments. But the policy holders fared worse than the companies, for, although the latter were brought to the brink of disaster the policy holders and their beneficiaries were robbed by inflation of much of the security and income which this form of investment is expected to possess. Or, again, "Various methods were used in determining the amount of wages that should be paid, such as index numbers of the cost of living or the price of some specific commodity, such as rye. No matter what system was used, however, the employee had nothing to gain by retaining his money and everything to lose; consequently he spent his earnings as soon as possible in order to obtain something worth while before the value of his money melted away. Not infrequently employees spent their wages for things they did not want and for commodities they could not use (in the hope of finding a buyer later) simply because anything was preferable to the money of the realm." The Holy Ghost hospital at Frankfurt-am-Main was founded in 1208 A. D. and was very richly endowed. In 1923 the interest on the remaining endowment was not enough to pay for a three-penny postage stamp, according to the annual report of the trustees. The following striking statement appears near the end of the report, after consideration of the hospital conditions throughout the countries affected by inflation: "Inflation shifted the burden of illness to a large degree from trust funds to patients." This statement evidently refers to the inability to provide adequate facilities or even sufficient food for the patients.

America Could Not Escape

Other examples, countless in number, could be given, but surely these are sufficient. But some one will say, "Ah, that may have been true in Europe where inflation ran wild, but we could not have anything like that in America." They said the same sort of thing in Germany and Austria—and the people of those countries are level-headed, sane people; but, having once started on the downward road, they were not able to stop until they reached the bottom and their so-called money had no value whatsoever. We may not go quite so far if we take up inflation, because the people may rise in their wrath and check it, but the saddest thing about the whole inflation proposal is that the end of it ushers in the worst tragedy. Even if we inflate further, we shall go back some day to the gold standard—of that every sensible person is confident—and when we go back we shall have to write down our assets, if there be any left, to a point which will be very close to annihilation. Even if we do not inflate we must go through some pain of mind and pocketbook when the present sixty-cent, or whatever it may be worth, dollar is traded for a dollar of honesty and a hundred golden cents. That will be bad enough, but frank inflation carried on, as it must be if it once begins, will mean that every man's home, fortune and even his happiness will be shattered at the resumption of an honest monetary system. But the inflationists will laugh at that assertion because they say that the gold standard has been finally discarded. Even they, however, will admit that we must have a standard value for our money. They in their transcendent wisdom will find and fix the standard for us when the proper time arrives. All things are possible, but so far the most noteworthy silence of the pseudo-wise has followed the demand for nomination of another standard which will forever supplant gold.

Depreciation Under the Revenue Act of 1934*

By Maurice E. Peloubet

Before we begin the discussion of our subject, I should like to read one verse from the Old Testament, the 14th verse of the 12th chapter of the First Book of Kings:

> "And (Jeroboam spake to them after the counsel of the young men, saying, My father made your yoke heavy, and I will add to your yoke: my father also chastised you with whips, but I will chastise you with scorpions."

We can hardly take up, in any direct way, treasury decision 4422 or mimeograph 4170 and the letters and other documents issued relative to these without considering the history of the deduction for depreciation as it has been allowed under the various revenue acts.

The revenue act of 1918 lists under allowable deductions from income "a reasonable allowance for exhaustion, wear and tear on property used in trade or business, including a reasonable allowance for obsolescence." This language has been retained in its identical form through all the revenue acts from that time, including the act of 1934.

It appears that the statutory concept of depreciation, which is the only one which concerns us here, is that the deduction is for wear and tear, including obsolescence, and must be reasonable. It would be natural to think that the treasury department would have gradually built up a volume of precedents and information which would progressively and gradually improve administration of this provision of the law.

The testimony of H. B. Fernald before the committee on ways and means at the hearings previous to the passage of the 1934 act gives a good idea of the well-informed accountant's view of what the treasury department has actually been doing in regard to depreciation. Mr. Fernald stated in response to a question:

> "When you are taking an average life in that way, trying to get a fair average on the matter, it is very likely there will be cases where you can find there has been some excess; but I can state from my personal knowledge that the treasury department in the last few years has been most carefully canvassing that matter and

*A paper read before the New Jersey Society of Certified Public Accountants, July 25, 1934.

working to eliminate the danger of the very thing you are speaking of."

and in response to another question:

> "I also know the very large extent to which they go on these depreciation questions both in the field and in the bureau, and my own experience is that although it may be handled in a somewhat broad way, as I think it must be handled, there has not been the erring on the line of allowing too much for depreciation."

It became quite clear in reading over this testimony that the members of the ways and means committee had been given the impression that great and widespread laxity had existed in the granting of depreciation allowances up to that time, which is borne out by a letter, dated January 26, 1934, from H. Morgenthau, secretary of the treasury, to Robert L. Doughton, chairman of the committee on ways and means, stating among other things:

> "The bureau has for several months had under consideration more effective means of administering the depreciation provision. Thus study has shown that through past depreciation deductions many taxpayers have (as shown by facts now known to exist) built up reserves for depreciation which are out of proportion to the prior exhaustion, wear and tear of the depreciable assets. If past methods are continued, the amount representing the basis of the assets will be completely recovered through depreciation deductions before the actual useful life of the assets has been terminated."

Let us look at the situation as it existed before these decisions were promulgated. We all know pretty well what constitutes physical wear and tear on machinery, buildings and equipment, and I think all of us will agree that in general this can be measured with a fair degree of accuracy if we assume that conditions prevailing at the time of the determination of the rate of wear and tear will be uniformly in effect in the future, and we can also make reasonably accurate estimates of the variations in the physical life if we know the changes in volume of production, efficiency of labor and other factors of like determinable nature.

Furthermore, all these factors can be localized to individual machines or units. It may be that records permitting such detailed studies to be made do not exist in many corporations. However, they do exist in some and there is no reason, except cost and inconvenience, that they should not exist in all. In any case the problem of physical wear and tear is one that can be solved, and the limits of error can be balanced against the cost of obtaining more accurate information.

But we are allowed a further deduction under the statute—that for obsolescence. This is, by its very nature, more difficult to determine and establish as it depends on factors not readily susceptible of accurate measurement and not within the control of the individual company or plant management. It is defined as follows:

Report of special committee on terminology of the American Institute of Accountants:

The basic idea conveyed by this word is that of becoming out-of-date or falling into disuse.

Oxford Dictionary:
The process of becoming obsolete.

Webster's Dictionary:
The state of becoming obsolete.

In all of these definitions it will be seen that the essential meaning of the word is steady, gradual progression towards uselessness or non-existence. We know that this process is going on continuously. It is sort of a negative growth and we know that the factors are operating quietly and steadily, for the most part invisibly, until their work is completed. Improvements are being made daily in machines and processes; fashions and styles are changing; natural resources are becoming exhausted; new materials are taking the place of old—all these things cause changes in the design of the machines which work on the material and the buildings in which they are housed.

Most of these factors are quite outside the control of the individual manufacturer or business man. He must know, if he is to exist and prosper, what the trend in his business is, but, in general, he can not say that a particular machine or a particular type of machine will become obsolete three years from now and another one will be obsolete five years from now. He does know, however, that both of the machines are becoming obsolete; in other words, they are suffering obsolescence, and as a prudent man he must provide for this certain though intangible loss of value.

The revenue acts have quite properly permitted allowances for obsolescence; and we have a long series of cases and decisions which allow the taxpayer to estimate this factor, to provide for it and to deduct the provision which he has made.

While the cases covering the right of the taxpayer to a reasonable allowance for obsolescence are numerous, two may be cited which illustrate the principle clearly.

In the appeal of *Robert H. McCormick* (2 B.T.A. 430) in calculating an allowance for obsolescence on an office building in Chicago, the fact that most buildings in Chicago could reasonably be expected to be torn down and replaced before the end of their physical life was held to be the determining factor in fixing a rate of obsolescence to be applied to the building. It is interesting to note here that the taxpayer was not required to prove that this particular building would be torn down before the end of its useful life but merely that buildings of this type could generally be expected to be demolished and replaced within a period shorter than their physical life. It will probably be quite difficult to have evidence of this sort accepted in the determination of depreciation which is required under the department's new policy. The taxpayer's legal right to the consideration of such evidence, however, is unchanged.

In the appeal of *Northern Hotel Company* (3 B.T.A. 1099) it was held that obsolescence of a hotel began when better hotels were built and that the allowance of 1/97th of the original cost to cover wear and tear should be increased by a deduction of 2% beginning with the year 1918 when the revenue act permitted an allowance for obsolescence. Here again is a case of a proper and lawful deduction. Perhaps it may be more difficult to obtain under the treasury department's new depreciation policy, but it should not be denied.

Another factor, not formerly of great importance, now looms large in the depreciation picture. We used to assume that, in the long run, variations in the rate of depreciation merely transferred income from one year to another, on the assumption that we would always get back our original depreciation base whether our rates were high or low. The theory that each year must stand by itself so far as depreciation is concerned may frequently operate to deprive the taxpayer of the right to deduct a portion of the cost of machinery which should be recoverable through depreciation. The position is not unlike that taken when the treasury department applied so-called "sustained depletion" to the values of mining properties as opposed to the actual deductions taken. Here it was held that failure to exhaust the depletion base did not justify additional deductions in later years.

We may summarize the position before the promulgation of treasury decision 4422 thus:

1. A reasonable allowance for wear and tear, including obsolescence, was assured to the taxpayer by law.
2. The base was cost or value at March 1, 1913, and this generally carried through to a second purchaser.
3. The total amount of the base was recoverable through deductions from income or the remainder was added to the loss in the year in which the loss was sustained.
4. Unless shown by the treasury department to be unreasonable, the taxpayer's computation of the deduction was accepted.
5. The treasury department made elaborate studies of depreciation and recommended uniform rates, which were published and then were applied by the income-tax unit and revenue agents.

In considering the effects of treasury decision 4422, let us first look at the results on the assumption that it is to be applied exactly as the department wishes it to be and that no questions will be raised as to the possible illegality or unconstitutionality of some of the treasury department's proposals. In the first place it must always be remembered that the program of the department in respect to depreciation is primarily determined by the size and character of the task set it by the secretary of the treasury. His letter to R. L. Doughton makes it quite clear that the department did not wish to attempt the task of administering the obviously illegal, not to say fantastic, proposal that a reasonable allowance for depreciation should, after being properly determined, be reduced by 25%. The proposal is, of course, ridiculous and contradictory on its face and would not, in all probability, be upheld by any court.

Recognizing, however, that congress demanded the raising of additional revenue, the treasury department promised, by means of changes in administration, without any change in the law, to bring in the additional $85,000,000 of revenue demanded by the committee on ways and means. This is a sufficiently impressive sum, but when we think that, at a tax rate of 13¾%, this means a reduction in allowances for depreciation and obsolescence to taxpaying corporations of about $618,000,000, we get some idea of the magnitude of the job which the treasury department chose for itself.

The latest year for which published statistics of income are available is the year 1931 and that year may not be unfair for comparison with 1934. We know that in general the industrial facilities of the country have not been largely increased since that time. The year 1931, while a year of declining profits, was better than 1932 or possibly 1933, and may approximate 1934 better than either of those two later years. A comparison of the treasury proposals with 1931 figures, therefore, should give us a reasonable basis for judging their probable effects.

The proposed or hoped-for reduction in depreciation allowed to tax-paying corporations of $618,000,000 amounts to 36% of the total deduction for depreciation taken by tax-paying corporations in the year 1931 ($1,721,295,000) and amounts to about 13% of the total income of all tax-paying corporations for that year ($4,642,204,000).

Mr. Morgenthau stated that taxpayers have built up excessive reserves in the past. From the published figures which show only net capital assets, lands, buildings and equipment, less depreciation, it does not appear that the average rate is excessive. The net figure for lands, buildings and equipment amounts to $45,687,523,000 and the depreciation to $1,721,295,000. This gives an average composite rate for all taxpaying corporations of some 3.77%. This rate would, of course, be lower if we knew the total depreciation base. It might be raised to a small extent by the exclusion of some non-depreciable assets, such as land. However, it is obvious that, on the whole, this composite rate is higher rather than lower than that actually used on a straight-line basis.

Under the United States revenue acts depreciation is taken on a straight-line basis, but under the British income-tax acts it is taken on a diminishing basis. The published statistics of the treasury department show only net assets so that as gross assets are not known we must calculate rates on a composite diminishing basis. A. S. Fedde, in a paper presented to the international congress on accounting held in London in 1933, gave percentages of reserves for depreciation to total plant in several important industries and these are used to convert the net depreciable asset figures published by the treasury department to gross for the purpose of determining straight-line rates. Where Mr. Fedde's figures are applicable they are used and where they do not exactly agree in classification a figure of 35%, substantially below the average reserves as shown in his paper, is used.

The table attached shows, for tax-paying corporations for the year 1931:

For tax-paying corporations (statistics of income—1931—U. S. treasury department):
  Net fixed assets per returns
  Depreciation per tax returns
Composite rate of depreciation (diminishing basis)
Rates allowed for British income-tax purposes on diminishing basis
Percentage of reserve:
  A. S. Fedde—paper presented at International Congress on Accounting, 1933
  Assumed at minimum
Straight-line composite rates actually taken
Straight-line composite rates as taken reduced by one-third to produce approximately $85,000,000 additional tax
Recommended by United States treasury department (*Depreciation Studies*, January, 1931)

It would appear that if the department's proposals are put into effect and the $618,000,000 deductions are denied, resulting in straight-line composite rates of from .82% to 5.85%, the deductions can hardly fail to be inadequate. If depreciable assets in the average plant, consisting, say, of 1/5th buildings and 4/5ths equipment, are depreciated at the low rates of 2% for buildings and 5% for equipment, we would have a composite rate of 4.4% as compared with 3.13% for all manufacturing corporations paying taxes on the basis proposed by Mr. Morgenthau.

Public utilities, it will be observed, show a composite rate on diminishing balances of 2.64% and they account for $670,237,000 of the total depreciation taken by all tax-paying corporations—$1,721,295,000.

In pursuing one means to its end the department must reduce this by one-third, with the depreciation of all other corporations, resulting in a straight-line rate of a little over 1% for utilities, even though the difficulties in further reducing the rates on government-supervised utilities and railroads are almost insuperable.

On the other horn of the dilemma dangles the engaging prospect of reducing all rates, other than those for public utilities, by two-thirds.

The department will not, of course, decide to leave utilities alone and to concentrate on industrial corporations, nor can it be expected to make an equal drive against all classes of corporations. The policy will probably be selective, but in the end there will still remain the three possibilities:

1. $618,000,000 deductions denied to all corporations approximately ratably.
2. $618,000,000 deductions denied principally to industrial corporations.
3. Failure on the part of the department to deny sufficient deductions to produce $85,000,000 increased revenue.

The third possibility would seem to be the one most apt to occur.

The British revenue authorities are generally conceded to do their work fairly well and they do not have the reputation of unduly favoring the taxpayer. Furthermore, their rates do not include any allowance for obsolescence. Yet their rates, on a diminishing basis, are, in the cases of nine industries where comparable rates are quoted, higher than the rates actually taken in 1931 in seven cases, about 1¼% lower in the case of the textile industry and ⅕ of one per cent. lower in the case of the metal trades. If any fair allowance for obsolescence were added to the British rates those of tax-paying corporations in the United States would be far lower. The proposed reduction to bring in the $85,000,000 tax would make our rates, including obsolescence, lower in every case than the British rates without it.

When the diminishing value rates actually taken by tax-paying corporations in the United States in 1931 are converted, on a basis where the possibilities of error are all on the side of producing higher rates, to straight-line rates they are lower in fourteen industries than those recommended by the department in the pamphlet *Depreciation Studies* published in 1931, and in no case are they higher.

I shall not take any more time to discuss the figures in the table. They are, of course, statistical rather than accounting and are prepared primarily to show trends and tendencies. Every attempt has been made to give the advantage to the contentions of the treasury department, rather than to make out a case against it.

Among other conclusions to be drawn from these facts is this: either the depreciation allowances are substantially correct and are calculated on fair rates or if some taxpayers have been calculating depreciation at excessive rates, others must be claiming grossly inadequate allowances. Unfortunately, Mr. Morgenthau has not given us much information, confining himself to general statements, backed up by references to studies made in the department but not yet available to the public.

Indications, apart from the treasury statistics, do not show that most corporations have taken excessive depreciation allowances. A survey of published accounts will indicate, in general, that depreciation is seldom more than adequate, and a review of our own clients' affairs will, I think, convince us that the depreciation taken by most of them is not more than is required by the conditions of their businesses.

We do not notice in going through a compilation such as Poor's *Manual* that depreciation taken is very heavy or that there are many plants almost written off the books, but on the other hand, we do notice an epidemic of write-downs that swept over the business community in the past few years which certainly indicated that the management of those corporations did not think their reserves were excessive.

If the secretary of the treasury is correct in his statements, he owes it to the business public to make a full exposition of the data on which he relies.

However, a discussion of the theoretical basis for the treasury department's attitude will not get us very far when we are dealing with a revenue agent. No matter how effective you may be in convincing the agent of the errors of the general practice of the department, you will get no result whatever from his change of heart. He is bound to follow this decision. Your position is to try within this decision if possible to get the reasonable allowance to which the taxpayer is still entitled, but if the department will not now make a reasonable allowance, you should keep your cases open and reserve all rights in anticipation of a time when some of the proposed methods of the department will be tested in the courts.

Meanwhile, we must advise our clients and possibly prepare their tax returns. We must take some position as to whether the accounts are adequate and correct as they now stand or whether they should be amplified or revised. We should do this with two things in view, (1) the securing of as nearly adequate a depreciation allowance as is possible under the present administration of the revenue act and (2) we should endeavor to leave each client in the best possible position to take advantage of later decisions which may reasonably be expected to modify or reverse the department's present attitude and practice. It will certainly be easier if we can prepare our returns on the assumption that we are forced to do as the department requires and to carry out, as nearly as possible, its instructions, making, of course, appropriate protests at every proper point. This applies only to form. The taxpayer using rates he considers fair should not admit that his rates are excessive or do anything to suggest such an admission if he wishes to retain his status as an "aggrieved taxpayer."

Let us look at the language of treasury decision 4422. This decision is primarily an amendment of article 205 of regulations 77—the article which deals with the methods and rate of computing depreciation. As we read through the decision we find that the first change of any importance is the omission of the words: "While the burden of proof must rest upon the taxpayer to sustain the deduction taken by him, such deductions will not be disallowed unless shown by clear and convincing evidence to be unreasonable." The next change is the omission of these words: "If it develops that the useful life of the property will be longer or shorter than the useful life as originally estimated under all the then known facts, the portion of the cost or other basis of the property not already provided for through depreciation allowable, determined in accordance with the useful life of the property as originally estimated, should be spread over the remaining useful life of the property as reëstimated in the light of the subsequent facts, and depreciation deductions taken accordingly." In place of these deletions there is added the following: "The deduction for depreciation in respect of any depreciable property for any taxable year shall be limited to such ratable amount as may reasonably be considered necessary to recover during the remaining useful life of the property the unrecovered cost, or other basis. The burden of proof will rest upon the taxpayer to sustain the deduction claimed. Therefore, taxpayers must furnish full and complete information with respect to the cost or other basis of the assets in respect of which depreciation is claimed, their age, condition and remaining useful life, the portion of their cost or other basis which has been recovered through depreciation allowances for prior taxable years, and such other information as the commissioner may require in substantiation of the deduction claimed."

Now let us see what these changes really mean: The first sentence omitted makes it appear that it is the department's intention to challenge practically every depreciation deduction and to force the taxpayer to present evidence of the reasonableness of the allowance claimed. There is nothing particularly new or startling in this. We are all familiar with the flurries in the income-tax unit which result in drives against particular types of deductions or classes of taxpayers. It is obvious, no matter what it theoretically should do, that the income-tax unit can not investigate every type of income or deduction continuously and with a uniform intensity and thoroughness. If it had merely intended to make a drive on depreciation deductions, as has been done in the past, such an amendment to the regulations would be quite unnecessary. However, substitution of the last three sentences of the revised article for the matter which is stricken out indicates a definite change in policy, although the language of the regulation does not indicate clearly the extent to which the income-tax unit is departing from its previous practice.

The first sentence of the new matter in the revised article sets up an entirely new principle. In the past it has generally been considered that, if depreciation allowances had been excessive prior to the current year, the depreciation actually sustained should be charged off until the cost or other basis of the property had been recovered. For instance, a machine costing $1,000 with a correct rate of, say, 10%, has been depreciated for two years at the rate of 15% per annum. At the end of the second year the correct rate is determined and $700 balance remains to be depreciated. Under previous methods 10% per annum for seven years would be taken. Under the amended article 8¾% would be taken for eight years. On the other hand, if in the same case 5% had been taken for two years, leaving a balance of $900 at the end of the second year, the total depreciation which would be allowed under the revised article would be 10% per annum for eight years, and the depreciation which was not taken in the first two years, that is, $100, would be lost to the taxpayer entirely. Previous department practice would have permitted the taxpayer to recover the entire $900.

The statement that the burden of proof rests upon the taxpayer tells us nothing new, as this has always been true of any deduction, and the practice of the department of not challenging depreciation allowances which appeared reasonable was merely an administrative expedient by the use of which it gave up none of its own rights, nor did it add anything to those of the taxpayer.

The next sentence covering the information which the taxpayer may be required to furnish is also a mere restatement of what has always been true, but has not always been enforced, for the same reasons of administrative convenience. We all know, however, that where there has been a controversy with the department involving depreciation it has always been necessary for the taxpayer to prepare full statements in support of deductions which the income-tax unit had disputed.

So far the amendments to the article itself do not seem particularly far-reaching and indicate merely an intention to go a little deeper into the question of depreciation allowances. The only thing at all new about the amendment is the possibility of losing some of the cost or basis of the property where insufficient depreciation has been taken in the past. However, we should not be deceived by the apparently innocuous appearance of these amendments. It is quite interesting to note that besides amending article 205 of regulation 77 and 74, article 165 of regulation 69, 65 and 62 is also amended to conform to the amendment of article 205. To get at the true meaning of this amendment we must go a little further and study first the letter of the secretary of the treasury to the chairman of the committee on ways and means. Mr. Morgenthau states that the reasons for these changes are:

"Acting under these provisions and the corresponding provisions of prior acts and regulations, the bureau has attempted to check the amount of depreciation deductions taken in income-tax returns by an investigation through its field officers of the records of taxpayers and by the preparation of detailed and often burdensome depreciation schedules which are ordinarily necessary before judging the reasonableness of the deduction. In proceeding in this matter the bureau has been handicapped in at least two important respects: First, the volume of this work has been such as to preclude the preparation of proper schedules in many cases. Second, the bureau has been placed in the position of having to show by clear and convincing evidence that the taxpayer's claim was unreasonable, a particularly difficult matter since the determination of the useful life of assets and the consequent rates of depreciation is largely within the taxpayer's experience."

I have already taken up the contention of Mr. Morgenthau that depreciation allowances have been grossly excessive in the past. Mr. Morgenthau states clearly that it is the intention of the department "to reduce substantially the deductions for depreciation with respect to many taxpayers in various industries." He says further that it is the intention that this shall be accomplished by requiring taxpayers to furnish detailed schedules of depreciation, by limiting deductions to amounts which will recover during the remaining useful life the unrecovered basis, and to place the burden of proof upon the taxpayer to sustain these deductions.

Mr. Morgenthau states further that:

"Although the studies of depreciation made in the bureau bear out the conclusion of the ways and means committee that as a whole the deductions taken for depreciation in the past have been excessive when considered in the light of the facts now known to exist, it is the opinion of the present bureau officials that the situation can be more equitably remedied through proper administrative measures than through legislation which would arbitrarily reduce each and every taxpayer's depreciation allowance by a certain percentage, whether or not the allowance may have been excessive for past years. I concur in this opinion, and I therefore urge that the matter be rested on proper administration rather than on legislative action."

It is obvious from this last paragraph that Mr. Morgenthau's legal advisers did not care to go quite so far as to deny a portion of a legal deduction properly computed.

This letter is the second document we have to consider in the department's new policy, and it brings out, much more clearly than the amendment to the regulations, the purpose and attitude of the department. I do not know what other information Mr. Morgenthau may have submitted to Mr. Doughton, but as we have nothing before us we must assume that the letter is all he had. It is, of course, clear that this letter is made up of broad and unsupported general statements and of restatements, purporting to be something quite new, of facts and conditions which have been in existence for a long time. The main points in this letter are that the treasury department is committed to increase the revenue by decreasing depreciation allowances: that the difficulties of doing this by lopping off an arbitrary percentage are so great that the department hesitates to attempt to enforce an increase in the revenue by such a means; and that the department seems inclined to turn every possible assumption or fact against the taxpayer.

This attitude of the department is brought out in more detail by mimeograph 4170, which is given in full in all tax services. It is really the kernel of the whole matter so far as the disclosing of the department's purposes and methods are concerned. While it is obscurely worded, a careful reading and a little meditation will bring out pretty plainly what the department intends to do.

The first paragraph has to do with information required and lists four points to be covered. The first three have to do with cost, basis, age and amount unrecovered. The fourth, however, demands "such other information as may be required"—presumably by the department—"to establish the correctness of the deduction claimed or to determine the amount of the deduction properly allowable." In other words, besides requiring statements of information which will be burdensome and expensive for many taxpayers to prepare, the department is in the position of being able to say that what is submitted is insufficient and may require all sorts of other data to support a taxpayer's claim.

The second sentence of the next paragraph, while implied in the amendment to article 205 of the regulations, comes out plainly for the first time and says: "A taxpayer is not permitted under the law to take advantage in later years of his prior failure to take any depreciation allowance or of his action in taking an allowance plainly inadequate under the known facts in prior years." This makes it quite definite and puts the taxpayer in a position of having to prove not only that his present deduction is correct but that all his past deductions have been not less than adequate. This may involve a great deal of difficulty and expense and if the adequacy of previous depreciation can not be shown to the department's satisfaction it may cause the taxpayer a substantial loss.

If certain machinery was for some reason operated at a higher speed, say, for the last three years than for the preceding five years, it would be quite correct to change to a higher rate of depreciation for the last three years. Such a condition is easily possible where machinery is unchanged but power equipment has been improved or where a machine next in line is improved and the machine in the first process is speeded up. However, the possible attitude of the revenue agent would be that judging from present conditions, which is all that he would know, the depreciation for the first five years had been inadequate and he would proceed to apply depreciation for those years on the same basis as for the last three years and would endeavor to see that the taxpayer lost that portion of his depreciable base. In a case like this the taxpayer should have incontrovertible operating and engineering evidence of the facts. While it is perhaps difficult to anticipate exactly what stand a revenue agent will take, it is nevertheless worth while to try to anticipate what will be done as evidence prepared before the examination and ready for submission to the agent may be much more effective than evidence prepared and brought forward in rebuttal of a conclusion on the part of the agent based on incomplete or misunderstood facts.

Paragraph three refers to the preparation of the data by the taxpayer and the placing upon him of the burden of proof. As we have seen previously the burden of proof has always been on the taxpayer and any temporary shifting to the department has been more apparent than real and has been permitted for convenience only. We see here also the tendency of the department not to limit itself to specific data, as the last sentence states that "all schedules and other data deemed necessary shall be prepared by the taxpayer and not by the examining officer."

The next paragraph deals with exceptions and these exceptions all have the same common basis, which although not specifically stated is quite clear—that is, where no or very little additional tax can be extracted from the taxpayer the full information will not be required. In other words, the department is not interested in the question of depreciation as such. Adequacy of the depreciation allowance in a corporation which is paying no tax or where the amount of depreciation is obviously too low or where there is not enough in it to warrant the expenditure of any time on the part of the revenue agent does not interest the department. If the department had a correct and scientific attitude it would be just as anxious to increase an inadequate allowance as to reduce claims for excessive depreciation. However, this paragraph brings out clearly that what the department seems to want is more tax rather than to determine a correct tax for every taxpayer.

The next paragraph deals with cases where complete and proper schedules have already been filed, either with previous returns or as a result of controversy with the department. While it is not so stated, it may be assumed that if these statements are not in the form required the corporation will have to revise them, and any corporation which has already submitted fairly elaborate schedules should examine its copies of these to make certain that they do comply with the requirements, so far as any one can tell what they are, of mimeograph 4170. Here again it is better to prepare your defence before being attacked.

We next come to the heading "Depreciation schedule." The first paragraph calls for nothing which has not already been required, as it has always been necessary to state the basis where assets are acquired otherwise than for cash.

The next paragraph states that the original cost or other basis and gross additions by years must be set forth separately. It also requires that adjustments of the accounts be shown. The principal departure from previous practice in this paragraph is the requirement that adjustments which should have been made are required to be shown, as well as adjustments which have actually been made.

I read the following paragraph:

"If the segregation of accounts in the past has not been sufficiently detailed to afford a reasonable basis for the determination of the depreciation deduction, the cost or other basis should be segregated into groups of accounts containing similar assets having approximately the same average lives, to serve as a basis for depreciation deductions for current and future years. If, however, a taxpayer for its own purpose keeps a record of each individual item or classifies its accounts into a large number of different groups, the data required by this mimeograph should be summarized in such form as will present an accurate statement of each distinctly different class of depreciable assets and of the reserve that has been accrued against each class to date for income-tax purposes. The examining officer should verify the correctness of these summarized schedules from the taxpayer's records, but the inclusion in the schedule of a voluminous mass of detail is not ordinarily necessary."

This paragraph explains exactly how the department would like the schedules to be made up. It does not indicate the method which will be most advantageous to the taxpayer. The best position for the taxpayer to be in regarding depreciation under the present administration is to have a detailed record of each item included in his accounts for buildings, machinery and equipment or other depreciable assets showing cost or basis, date acquired, expected life, depreciation written off and all other pertinent data. A good form for such a record is that given on page 97 of Saliers on *Depreciation*—Principles and Applications—1922 edition. The further the taxpayer departs from these conditions the more difficulty he may have in establishing his position. It is much easier to show the probable life of an individual machine than that of a group and it is practically impossible to prove a loss on dismantlement, except where individual records are kept. The disadvantages of accounting for depreciable assets in groups will be brought out later. It may not be a fair statement but it would almost seem, on reading this paragraph, that the effect of the use of group classifications advised by the department is to cause the taxpayer to prepare data in a form which will be easier for the department to attack than it is for the taxpayer to defend, and I think the taxpayer should consider very carefully the damage which may be caused him by any deviation from the presentation of his data in the most detailed possible form.

The next paragraph deals with the analysis of the depreciation reserve and the instructions should not cause much difficulty if the accounts have been properly kept.

The next paragraph reads as follows:

"DEPRECIATION DETERMINATION FOR YEAR UNDER CONSIDERATION

"If, upon examination and verification of the schedule, it is found that the cost or other basis of any depreciable property has been fully recovered though the property is still in use or where the reserve as provided is higher than is justified by the actual physical condition of the property, it will be presumed that the depreciation rates allowed in the past have been excessive. After careful consideration of the information filed in accordance with the requirements of this mimeograph the examining officer should follow the provisions of this mimeograph and of treasury decision 4422 in determining rates of depreciation for the years under consideration."

Here we have some statements which sound reasonable enough but on examination prove to be highly arbitrary, possibly in conflict with the law and may frequently be in conflict with the facts. I think all of us who have had any experience in manufacturing accounting must realize that a machine is not always broken up or even taken out of line at the exact time that its real usefulness ceases. It is easy to think of cases where an old machine is allowed to stay in its position on the floor of a factory long after it has actually become obsolete. I can think of a case where a machine purchased about fifteen years ago was depreciated at the rate of 10% per annum but is still on the floor of the factory. There is one small order which has to be made up annually for reasons of friendship and policy but is unprofitable and would ordinarily be undesirable, which can be done on this machine. Its operation is expensive and inefficient. If there were ten or twenty times as much work for it to do the machine would be thrown out and a modern one installed. However, it is allowed to stay on the floor for the special purpose of doing this one particular little piece of work which is undesirable in itself, but must be done for the purpose of policy. To my mind there is no doubt that the machine is obsolete and valueless. The 10% rate was none too high, as perhaps 99% of the work done on that machine is now done on others of a more modern type. However, under the paragraph just read, the agent would probably consider this condition as good evidence that excessive rates were being charged. This, perhaps, is an extreme example, but it serves to show that the fact that a machine has not been junked and has been completely written off is not necessarily prima-facie evidence of excessive rates. The mimeograph also states that where the reserve as provided is higher than is justified by the actual physical condition of the property, it will be presumed that the depreciation rates have been excessive. Here we come to one of the principal weaknesses of the department's position. The income-tax laws of the United States since the year 1918 have definitely included obsolescence as a deduction. The assumption that any reserve higher than the physical condition of the property warrants is excessive is equivalent to a denial to the taxpayer for any deduction for obsolescence. A shrewd operator of a knitting mill which uses highly specialized machinery knows that changes in style are frequent and sweeping. He knows that expensive and complicated machinery is necessary to produce certain types of knitted goods, and it is unreasonable to presume that styles will remain the same for more than a few years together. It would be the worst kind of improvidence for such a manufacturer to depreciate his machinery solely on conditions of physical wear and tear. Certain machines, such as carding and spinning machinery, suffer little obsolescence, and a rate substantially equivalent to physical wear and tear would probably be fair for these. However, when we come to knitting machines, which produce varied and intricate stitches and weaves, it is clear that there must be provision for obsolescence. In the case of factories which purchase machinery for the work of particular customers or under special contracts, the machinery, although in good physical shape at the end of such contracts, will have little more than a scrap value. An attempt to determine from the physical condition of such machinery the adequacy of the reserves, say in the middle of the period of the contract, would be certain to produce a rate far lower than the facts or prudent judgment would warrant. When cases resulting from the attempted application of treasury decision 4422 are brought before the board of tax appeals and the courts, the most frequent point of attack in all probability will be the virtual denial of obsolescence as permitted under the law.

It is interesting to note that article 206, directly following the amended article 205, is not formally amended. This article reads:

"Art. 206. OBSOLESCENCE.—With respect to physical property the whole or any portion of which is clearly shown by the taxpayer as being affected by economic conditions that will result in its being abandoned at a future date prior to the end of its normal useful life, so that depreciation deductions alone are insufficient to return the cost or other basis at the end of its economic term of usefulness, a reasonable deduction for obsolescence, in addition to depreciation, may be allowed in accordance with the facts obtaining with respect to each item of property concerning which a claim for obsolescence is made. No deduction for obsolescence will be permitted merely because, in the opinion of a taxpayer, the property may become obsolete at some later date. This allowance will be confined to such portion of the property on which obsolescence is definitely shown to be sustained and can not be held applicable to an entire property unless all portions thereof are affected by the conditions to which obsolescence is found to be due."

No one wishes to claim mere general deductions for obsolescence. However, where machinery is bought to carry out specific contracts or for a specific purpose and where there is little likelihood that it will be used for any other purpose, the taxpayer, on his own books and in the exercise of his own judgment, will recognize this obsolescence and he is entitled, where he can show that economic conditions will result in abandonment of the machinery at a future date, prior to the end of its useful life, to have such deductions recognized from year to year. Cases in point have been cited earlier in this paper.

In a discussion on Mr. Fedde's paper on *Depreciation and*

Obsolescence delivered at the international congress on accounting held in London in 1933, R. N. Carter stated:

"It is interesting to observe that in America obsolescence is allowed without renewal. We can scarcely have that here, under our existing legislation, as it would amount to an allowance for lost capital. Equally we can not have an allowance for improvement in the process of renewal of obsolete items. That would give the old concern an advantage over a new one."

This is a very interesting statement of principle and sums up the difference between our law and the British law in this respect. The taxpayer is certainly burdened and harassed sufficiently through the right of congress to tax gains on capital transactions. Mr. Carter points out that it is probably because of that right to tax capital gains that the allowance for obsolescence is constitutional and has been contained in all the revenue acts for the last sixteen years. The treasury department does not state affirmatively that deductions for obsolescence will not be allowed. It does, however, issue regulations and instructions which amount to a virtual denial of this lawful deduction.

The insistence of the department on physical condition and physical life as the most important, if not the sole factor, in determining depreciation rates, make the engineering features of depreciation more important than ever before and it would seem wise for every accountant who is faced with the problem of revision of plant accounts in accordance with the department's new depreciation policy to consider whether the employment of engineers or appraisers is required. Where a company has records which permit the purchase, sale or disposal of individual machines to be traced it would seem that all the work could be handled by the accountant or the client's staff, as it is unlikely that the department will pay much attention to valuations made by appraisers or engineers where these differ in total from book figures, but where the company records do not permit the establishment of values for individual machines it would appear that a plant inventory taken by competent engineers or appraisers would have to be accepted by the department. The values would need to be ascertained from the books so far as possible and in any case would need to be reconciled in total with the book figures. It is also possible that in large organizations the company's own engineering and technical force could coöperate with the accountant. Engineering advice will undoubtedly be of value in determining the remaining life of the fixed assets. It is a difficult practical problem to decide the extent to which we wish to burden our clients with the cost of additional technical services, and it is not impossible that in some cases the cost of preparing the information in a way which would be convincing to the department would be greater than the saving in tax by the maintenance of present rates. This is a practical question to be decided in every case, but it is one that should not be overlooked.

The next paragraph, on retirement of assets, reads as follows:

"Where an account contains more than one item it will be presumed that the rate of depreciation is based upon the average lives of such assets. Losses claimed on the normal retirement of assets in such an account are not allowable, inasmuch as the use of an average rate contemplates the normal retirement of assets both before and after the average life has been reached and there is, therefore, no possibility of ascertaining any actual loss in such circumstances until all assets contained in the account have been retired. In order to account properly for such retirements the entire cost of assets retired, adjusted for salvage, will be charged to the depreciation reserve account, which will enable the full cost or other basis of the property to be recovered. Where the taxpayer by clear and convincing evidence shows that assets are disposed of before the expiration of the normal expected life thereof, as for example, because of casualty, obsolescence other than normal, or sale, losses on the retirement of such assets may be allowed, but only where it is clearly evident that such disposition was not contemplated in the rate of depreciation. In single-item accounts or in classified accounts where it is the consistent practice of the taxpayer to base the rate of depreciation on the expected life of the longest lived asset contained in the account, the loss upon the retirement of an asset is allowable."

This shows clearly the disadvantageous position in which the taxpayer is put if each individual item of plant and equipment is not treated separately. Treasury department employees have stated that no loss will be recognized on the sale or disposal of any assets which form part of a group for depreciation purposes, even though the group may be composed of a number of identical machines. For instance, a bank of 50 braiders in a cable mill, which are identical, will be treated as a composite unit for this purpose and if one braider fails and is scrapped no loss will be recognized. If, however, a separate record for each individual braider is kept the department will be forced to recognize the loss when the individual machine fails or is scrapped. The department may say that it already recognizes obsolescence when it happens. I do not, however, think this is true and what is really meant is that the department will recognize it when the loss is realized. We know from our definition of obsolescence that it is a gradual process and it appears to be the intention of congress that it should be recognized as it takes place, as nearly as can be determined.

Joseph J. Klein in his book *Federal Income Taxation* emphasizes this gradual character and the influence of economic and social factors arising from without the business and beyond the control of the management. He states, "In other words, the period of economic usefulness of property may be shortened even though its physical life may not be otherwise than normally affected."

I can not help thinking that the over-emphasis on physical life in treasury decision 4422 and mimeograph 4170 may result in taking away from the taxpayer by regulation what has been given him by law. As article 206 of regulation 77 has not been amended it is clear that the department does not wish formally to deny or limit the taxpayer's legal allowance for obsolescence. But I think here, as in so many other cases where the taxpayer has any evidence for his deduction, he should gather and marshal this evidence in the best possible form before an attack is made on his calculations.

The last paragraph of mimeograph 4170 is a statement to the effect that cases now open are affected by this decision. This is something which should be given the most serious attention. If for any reason your clients have cases open on any other points, the department will in all probability question the deductions for depreciation and force the taxpayer to provide detailed information for as far back as any year which is open before the department.

While in general the odds are against the taxpayer in the treasury department's new depreciation policy and in the interpretation of it, there are a few features which can work to the advantage, as well as to the disadvantage of the taxpayer, largely because the new depreciation policy applies to all years not closed. Therefore, if any advantages to the taxpayer are developed the taxpayer can amend his returns in his own favor in any year which is open. Another rule which works both ways is that all previous agreements with the department and all previous decisions are assumed to be abrogated by the new policy. If, therefore, for convenience a corporation in the past, to avoid a laborious compilation of plant statistics, has agreed on some compromise base and compromise composite rates with the department, it would seem quite possible to revise the base and rates to more nearly correct figures and to disregard the previous agreement. This would entail an extensive accounting investigation and probably would require the services of an engineer or appraisal company. However, such a taxpayer would be in so weak a position without this information that he would probably wish to obtain it in any case, and here it is barely possible that the new depreciation policy might be of advantage to the taxpayer, particularly if several years were open. If current indications are trustworthy the department is apt to make concessions if it feels the difficulties of opposing the taxpayer are sufficiently great. This possible revision of base as well as a possible increase in rate for a corporation, previously not taxpaying which is entering the tax-paying class and had taken inadequate rates while a non-taxpayer, would seem to be about the only ways in which the new depreciation policy could benefit the taxpayer.

The safe course to pursue would seem to be to assume that the treasury department means not only what it says but what it implies; that the department is thoroughly in earnest in making an attempt to raise $85,000,000 of revenue by the disallowance of depreciation to tax-paying corporations; and that the department and its agents are not going to be particularly anxious to protect the taxpayer in the application of its procedure. The situation would seem to be more serious for the small and moderate-sized corporation than for the large and well organized one. It seems likely that the department will make the greatest drive against corporations which have an income, but do not have adequate records. The taxpayer with a complete record of each item of depreciable assets and the depreciation applicable thereto will have nothing to fear unless the rates he has used are, in fact, excessive. The agent may attempt to reduce rates, but it will be quite difficult for him to do so in the face of complete records backed up by engineering data and records of similar items either in the same company or in other concerns in the same business. The small concern, however, which has kept no detailed plant record and has only one or two classifications of depreciable assets on its books, will be in a very difficult position. No matter what rates have been used the agent can always say, "The rates are excessive; I will reduce them by 50%," or "by one-third," or whatever proportion he prefers and this will stand until the unfortunate taxpayer is able to prove that he has used a reasonable rate on an actually existing undepreciated balance of depreciable assets. It will be very hard to persuade the agent to recede from his position by mere general arguments or by statements not supported by financial and engineering data. It is quite probable that the greatest sufferer from these attempts to deny the taxpayer's legal deduction for depreciation and obsolescence will be the small corporation which either has no records or can not afford to keep them in the detail required to controvert the assertion by the revenue agent of excessive rates. The department may say that it does not require detailed records to be kept, and in mimeograph 4170 it states specifically that it does not want a voluminous mass of detail. However, the department makes it perfectly clear that without complete detail every presumption is against the taxpayer and that the object is to bring in the largest possible revenue with the least expenditure of effort.

In many cases there is no business reason why elaborate plant records should be kept, and it seems unfair and oppressive to require such records as the price of a fair depreciation allowance. Among the larger companies the requirement for such large amounts of additional detailed information is generally not impossible to fulfil, although here again the expenditure involved is sometimes a very serious consideration. It is rumored that it will cost one of our large corporations over a million dollars to supply the data required, and I know of other corporations where the expenditure may run into the hundreds of thousands of dollars. Even in comparatively small manufacturing companies it is difficult to rearrange the accounts as required without the expenditure of several thousand dollars, which may be an item of some importance. It should be borne in mind that these companies are not making these expenditures on any speculation or hope that they will get additional depreciation allowances. They are merely fighting to hold what they already have and what has formerly been recognized as correct and lawful and the department apparently has the legal right to place this heavy, troublesome and useless burden on business and industry in general.

The failure of the attempt to raise the entire $85,000,000 is almost inevitable, but it will probably cost the taxpayers a substantial part of this amount to prepare and prosecute their cases.

We have a great many decisions sustaining the rates and practice used by corporations and there will probably be many others which will grow out of the present situation.

To sum up:

1. We must take the treasury department at its word—both as to information required and the arbitrary and possibly illegal action contemplated.
2. We must realize that most small corporations can not afford to carry their cases to the supreme court and generally do not wish to litigate tax cases at all.
3. The most satisfactory way to handle a tax case is to have the agent accept a basis satisfactory to the taxpayer.
4. In this particular situation the best way to have the agent accept the taxpayer's rates and basis for depreciation is to present him with every possible detail. This will have two results. First, it should convince him of the difficulty of fighting the case, and, second, it will provide him with good material for his own report. This detail should be presented as nearly as practicable in the form shown as schedules to mimeograph 4170. Close adherence to this form will make acceptance of the figures more probable both by the agent and the income-tax unit.
5. Where satisfactory allowance can not be obtained in the first place, everything should be done to hold the cases open until the board of tax appeals and the courts have had an opportunity to review the various phases of the new depreciation regulations. This may be done either by appeal to the board of tax appeals against proposed assessments or by claims for refund and/or in court if the additional assessments are paid without appeal to the board.

In this way the case can be kept open for several years, and within that time the situation may possibly be clarified. Above all, the taxpayer should realize that the treasury department can not amend the law by making regulations and that regulations have the force of law only when they are consistent with the law. Every regulation or order which appears to be at variance with the law should be contested on that ground.

One method of resisting arbitrary reductions in depreciation allowances might be through trade associations. Information from a trade association as to the general condition in the trade, particularly in respect to obsolescence and generally expected life of the machinery used in that trade, would be quite valuable.

The present time seems a particularly inappropriate one for the government to attempt to reduce depreciation deductions. The law permits the cost of the asset to be recovered without regard to changes in replacement value or any other factor. There is much weight in the contention that all depreciation allowances taken in the year 1933 and subsequently are inadequate unless the rates have been increased proportionately to the devaluation of the dollar. All plant acquisitions previous to devaluation had a cost in gold and all plant acquisitions after devaluation, while the cost is expressed in current irredeemable dollars, also have a price in gold, the gold price being a little less than sixty cents gold per irredeemable dollar. There is certainly good economic ground for saying that rates expressed in irredeemable dollars should be increased to cover the cost of plants paid for in gold or, conversely, that plants paid for in gold should be increased to their equivalent in irredeemable dollars and rates should be applied to that base. What the legal status of this claim would be I can not pretend to say, but it certainly seems to be a collateral argument of some validity against wholesale reduction of depreciation rates. While we have not yet had a rise in price level proportionate to the devaluation of the dollar this is inevitable and, when it arrives, the inadequacy of depreciation allowances calculated in irredeemable dollars on a gold base at rates previously in force will be increasingly evident.

Another anomaly in the 1934 act which must be considered in the case of retirement of assets is the effect of the provisions covering gains and losses on sale of capital assets. Under section 117 of the 1934 act a corporation selling buildings or machinery used in the manufacture of its product can apply only $2,000 of any loss sustained against current income, the remainder of the loss being applicable to gains from sale of capital assets only.

Fantastic and ridiculous as it may sound it is quite possible for a corporation to save money by destroying obsolete buildings and machinery instead of selling them.

Assume that a corporation owned buildings, in, say, a lumber camp, worth $30,000. They have been depreciated to a book value of $20,000 when the destruction by fire of the timber in the neighborhood makes the camp buildings worthless to the company. The company can not move them and it has no gains from sale of capital assets in the year.

Trappers and ranchers in the neighborhood of the camp can use the lumber and some of the fittings in the camp buildings and they offer the company $1,000 for the buildings as they stand. The company at first is inclined to accept the offer but their accountant points out that if they do it will cost the company $1,485 in cash rather than result in a realization of $1,000 salvage. This is the proof he offers:

Cost	$30,000
Depreciated value	20,000
Deductible loss on total destruction	20,000
Tax saving at 13¾%	2,750
Compared with:	
Depreciated value	$20,000
Sale price	1,000
Loss on sale	$19,000
Portion deductible	$ 2,000
Tax saving	$ 275
Price realized	1,000
Net gain on sale in cash	1,275
Tax saving on destruction	2,750
Loss in cash to company if sold, or gain on destruction	$ 1,485

The president of the company, after a few laudatory remarks on the wisdom of the framers of the tax laws, duly orders the destruction of the buildings.

It is not clear that in such a case the obsolescence might not be recognized as having occurred before the buildings were destroyed or sold. If buildings and equipment as they stand are obsolete and worth only their salvage value, the loss due to obsolescence should then be allowable, regardless of whether or not they are sold for their salvage value. It may, however, be cheaper to forego such a sale than to try to prove the claim if the sale is made.

No one really likes to pay taxes, but it is much pleasanter to pay a tax if it is imposed in a clear, definite way and applies equally to all taxpayers who live or work under substantially the same conditions. It is, however, intolerable to be told that your tax rates have not increased, or have only increased a small percentage, and to be told in the same breath that you will pay more tax because deductions are going to be denied or reduced. There is neither scientific basis nor common sense in this method of taxation. The only fair thing to do is to define income and ex-

ASSETS AND DEPRECIATION RATES—TAX-PAYING CORPORATIONS—1931

	For tax-paying corporations (Statistics of income, 1931—U. S. treasury department) Net fixed assets, per returns	Depreciation per tax returns	Composite rate of depreciation (diminishing basis)	Rates allowed for British income-tax purposes on diminishing basis	Percentage of Reserve: A. S. Fedde—Paper presented at International Congress on Accounting, 1933	Percentage of Reserve: Assumed at minimum	Straight-lines composite rate actually taken	Straight-line composite rates as taken, reduced by one-third to produce approximately $85,000,000 additional tax	Recommended by U. S. treasury department (*Depreciation Studies*, January, 1931)
Agriculture	$ 352,338,000	$ 14,822,000	4.20%	5 to 15 %		35%	2.73	1.82%	2 to 20 %
Mining	1,285,018,000	40,170,000	3.12	6¼ to 10		35	2.03	1.35	2½ to 10
Food Products	1,736,642,000	126,290,000	7.27	5 to 15		35	4.73	3.15	5 to 10
Tobacco	85,265,000	5,743,000	6.73			35	4.37	2.91	5 to 10
Textiles	626,989,000	55,419,000	8.83	5 to 7½	45.8%		4.79	3.19	3½ to 5
Leather	84,129,000	6,783,000	8.06			35	5.24	3.49	3½ to 6⅔
Rubber	160,789,000	15,737,000	9.78		39.2		5.94	3.96	5 to 6½
Forest products	171,412,000	9,667,000	5.63			35	3.66	2.44	
Paper and pulp	457,589,000	29,503,000	6.44	7½		35	4.19	2.79	4 to 6
Printing and publishing	505,123,000	34,391,000	6.81	7½ to 10		35	4.43	2.95	5 to 33⅓
Chemical and allied products	2,161,831,000	139,439,000	6.45	7½	41.8		3.75	2.50	5 to 20
Stone, clay and glass	416,903,000	27,269,000	6.54			35	4.25	2.83	2 to 16
Metal	2,112,607,000	162,661,000	7.69	7½		35	5.00	3.33	4 to 20
Construction	252,450,000	34,065,000	13.49			35	8.77	5.85	5 to 33⅓
Trading	2,066,489,000	141,307,000	6.83			35	4.44	2.96	
Service, professions, etc.	1,029,078,000	61,756,000	6.00			35	3.90	2.60	
Finance, banking and insurance	6,582,611,000	126,677,000	1.92			35	1.25	.82	
Unclassified	249,417,000	19,359,000	7.76			35	5.04	3.36	
Total except utilities	$20,336,680,000	$1,051,058,000	5.17			35	3.36	2.24	
Transportation and public utilities	25,350,843,000	670,237,000	2.64	3 to 7½		35	1.72	1.15	3 to 10
Total	$45,687,523,000	$1,721,295,000	3.77			35	2.45	1.63	
Total manufacturing	$ 8,759,363,000	$ 632,097,000	7.22			35	4.69	3.13	

penses in a simple, understandable, accurate manner and raise more revenue by increasing rates. One of the principal causes for the unspeakable complexity of our tax laws is the endeavor to tax everything rather than to tax what is definitely recurrent or ordinary income and limit the tax to that. It is not difficult for congress to raise or lower rates and it is not, in the long run, very disturbing to business or to peoples. The constant doubt which we are now in as to what will next be held to be income, or what deduction will next be disallowed in part or in whole is a factor that makes for disturbance and uncertainty through our whole business life.

It is bad enough to have a law which is full of unnecessary complexities, but since it is the law we can do nothing but follow it. We should at least be protected from any change or extension of the law by administrative methods.

The Campaign Against Double Taxation *

By Ralph Coughenour Jones

The serious discussion of double taxation, according to Professor Seligman, began early in the thirteenth century. In recent years, however, interest in the subject has become intensified, not because modern tax laws are more unjust and conflicting than the laws of earlier times, but because the rapid extension of business enterprises across the boundaries of states has created new opportunities for double taxation and made the burden more onerous. Double taxation will probably persist to a greater or less extent so long as we have economic interdependence on the one hand and a multiplicity of governmental units with their large spending programs on the other. So complicated are the problems to be solved that seven centuries more in the campaign against double taxation may still fail to bring complete success.

If the prospects of eliminating double taxation are so remote, one may well ask whether the attempt is worth while. It is clear, however, that the campaign must continue unabated if the burden is to be reduced or even prevented from increasing. The situation reminds one of the scene in *Alice in Wonderland*, where Alice, panting a little, says to the Red Queen: "Well, in our country, you'd generally get to somewhere else—if you ran very fast for a long time as we have been doing." And the Red Queen replies: "A slow sort of country! Now, here, you see, it takes all the running you can do to keep in the same place." In the face of a rising tide of taxation it will be no mean achievement merely to prevent an increase in double taxation. It is not a "slow sort of country" in which we live. All governmental units, large and small, are searching for new sources of revenue to help balance tottering budgets, and a rabid nationalism is rampant throughout the world. Only the utmost vigilance can prevent the appearance of new instances of double or multiple taxation.

Before proceeding further it may be well to pause for a moment to consider the meaning of the term "double taxation." "Double taxation in the simplest sense," according to Professor Seligman, "denotes the taxation of the same person or the same thing twice over." (*Essays in Taxation*, 10th edition, New York, 1928, p.

* An address delivered at the annual meeting of the Rhode Island Society of Certified Public Accountants, Providence, R. I., April 17, 1934.

98.) This definition admittedly is too broad. Professor Fred R. Fairchild of Yale University has formulated a definition which corresponds more closely to accepted usage. "Double taxation," he says, "is the imposition of the same tax upon the same object twice during the same fiscal period by the same jurisdiction or by coördinate jurisdictions." There can be no doubt that anything which comes within the limits of this definition is double taxation, and there can be little doubt that it is unjust and discriminatory. Note that according to this definition double taxation does not occur when both a state and the federal government levy a tax upon the same income. Here the jurisdictions are not coördinate. The search for an exact definition, however, is difficult and perhaps unnecessary. Double taxation in this paper will be used in the sense of Professor Fairchild's definition. It is this type of double taxation which we are seeking to eliminate. Though double taxation occurs in many forms, I shall devote attention chiefly to the problem as it arises in the taxation of business income.

The need for constant vigilance to prevent the increase of double taxation was well illustrated during the consideration of the revenue bill of 1934. In at least three sections, the bill as adopted by the house of representatives provided new forms of double taxation. Section 131 arbitrarily reduced by one half the credit for taxes paid abroad; section 403 imposed upon American citizens resident abroad the full federal estate tax on all property, real as well as personal, wherever situated; and section 104 authorized the president, in certain circumstances, to double the taxes of each citizen and corporation of a foreign country. Strong protests by the committee on double taxation of the American section of the International Chamber of Commerce, the treasury department and others led to the adoption of amendments correcting the worst features of sections 131 and 403 of the house bill, but section 104 remained essentially unchanged.

The credit for foreign taxes is necessary in the United States as a measure of partial relief from the double taxation which would otherwise result from the inconsistency of taxing at the same time all income having its origin in the United States and all the income of American citizens, residents and corporations, regardless of origin. It would be better in many ways to avoid double taxation by exempting all income, or at least all business income, having its origin in another country, but such a move might not be feasible politically. The present provision, however, is wrong psychologically in that it creates the impression that the government is granting a special favor to certain taxpayers who are generally assumed to be large corporations. The opposite, of course, is true. It is no special favor to receive a credit against a tax which should never have been levied, particularly when the credit under certain conditions is less than the tax on the income earned abroad. The assumption that the credit is primarily beneficial to large corporations is also of doubtful validity. Such corporations usually derive a relatively small proportion of their total income from foreign sources and they are, as a rule, in the best position to avoid a double tax by means of subsidiary companies or other devices. Companies of moderate size engaged principally in international trade would be more apt to suffer heavily from the elimination of the credit.

In any event, the elimination of the credit would simply add another impediment to the revival of foreign trade, with little, if any, increase in revenue. The action of the house in seeking to reduce the credit by one half was obviously an illogical compromise. It recognized the principle and at the same time denied its application. The full credit was continued in the revenue act of 1934, but the struggle to prevent its emasculation will undoubtedly have to be resumed when future revenue bills are under consideration.

The amendments to the estate tax, section 403 of the house bill, constituted deliberate double and probably confiscatory taxation of the estates of decedent citizens resident abroad, possibly with the intention of punishing expatriates. These amendments violated the generally accepted rule that the country in which a person has his residence is entitled to tax the entire estate, except real property situated elsewhere. They violated also the almost universal rule that real estate is taxable only in the country in which it is situated. Section 404 of the act as finally adopted, however, does exclude real estate situated abroad from the gross estate of decedents, but apparently in the case of non-resident citizens the full estate tax must be paid on other property situated abroad.

With respect to section 104 of the bill, the following recommendation was made:

"The committee on double taxation of the American section of the International Chamber of Commerce recommends that if section 104 of the bill is to be adopted, it should be amended so as to cover the matter of allocation of income and also to permit the executive branch of the government to enter into agreements with foreign countries looking toward the elimination of discriminatory taxes and providing for equitable methods of allocating income for the purpose of taxation among the several countries in which the activities occur."

Section 104 of the bill became section 103 of the act, but the spirit remained the same. Section 103 provides, in part, that "whenever the president finds that, under the laws of any foreign country, citizens or corporations of the United States are being subjected to discriminatory or extraterritorial taxes, the president shall so proclaim and the rates of tax imposed . . . shall, for the taxable year during which such proclamation is made and for each taxable year thereafter, be doubled in the case of each citizen and corporation of such foreign country. . . ." This section is, of course, designed to protect American interests, but even the most elementary knowledge of human nature suggests that it is much more apt to evoke retaliation than coöperation. A real advance in reducing double taxation could have been made, however, if the president had been given the power to make reciprocal agreements with other nations as well as to threaten them. If the president is to have the power to punish discrimination by other countries, he should, it would seem, be given the power to remove any discrimination against their nationals which may appear in our own law. He is now in the anomalous position of being able to punish others for abuses which he is unable to remove from the laws of his own country.

The reference to agreements with foreign countries arises no doubt from the interest of the International Chamber of Commerce in the efforts of the League of Nations to reduce or eliminate double taxation. It was the international chamber, as a matter of fact, which started in 1919 a sustained movement to reduce international double taxation. The active direction of this work was later assumed by the League of Nations.

The first step in the league's campaign was a careful analysis of the economic fundamentals of the problem prepared by Professor Bruins of Holland, Senator Einaudi of Italy, Sir Josiah Stamp of England and Professor Seligman of Columbia University. Their report was published under the date of April 5, 1923. Subsequently, the whole problem was studied at a general meeting of government experts on double taxation and tax evasion, and their report was published in October, 1928. It contained, among other things, three model bilateral conventions, Ia, Ib, and Ic, for the use of states wishing to reduce double taxation by treaty. Three drafts were thought to be necessary because of the different types of fiscal systems existing in various countries. Several treaties have since been drawn along the lines of these model conventions.

It was apparent, however, that a more complete study of the problem was needed and, largely through the efforts of the late Dr. T. S. Adams of Yale, a grant of $90,000 was obtained from the Rockefeller Foundation to finance a thorough investigation. Mitchell B. Carroll, former special attorney in the United States treasury department, was appointed to direct the inquiry. The results of this study have since been published in five volumes. The first three volumes contain descriptions of the tax systems of 23 countries and three American states, written by the tax administrators or experts in each country or state. These descriptions, naturally, will soon be out of date as to details, but they give a good picture of general fiscal policies which will probably be fairly permanent. Volume IV contains Mr. Carroll's summary of the whole survey, and volume V contains my own study of some of the accounting aspects of allocation.

The survey made by the League of Nations reveals a substantial agreement among the authorities of the several nations on a number of important points. It is generally agreed, for instance, that business income should be taxed only in those countries in which permanent establishments of an enterprise are located, and the term "permanent establishment" has been defined with considerable care. It is generally agreed, moreover, that the rental of land, royalty on mines and other income definitely relating to land should be taxed in the country in which the land is situated. Serious difficulties still exist, however, between debtor and creditor countries with respect to the taxation of interest, dividends and the like.

After the conclusion of the survey by the League of Nations, the fiscal committee adopted a draft convention for the allocation of business income between states for the purposes of taxation. This convention and the three model bilateral conventions previously mentioned provide the machinery for making allocations of practically all types of taxable income between countries which are disposed to eliminate double taxation by agreement. Several bilateral treaties have already been made, and it is to be hoped that the latest draft convention on the allocation of income will likewise be favorably received. If the countries of the world succeed in reaching some workable solution to the more pressing problems of currency stabilization and tariffs, it is not improbable that they will turn their attention again to the problems of double taxation.

Even though the proposed draft convention were generally adopted, some difficult problems of allocation would still remain. The convention states the principle which is to govern allocations of business income, but does not prescribe methods in detail. The draft convention definitely adopts the principle of separate accounting as standard and provides optional methods to be used only when the separate accounts of the permanent establishments of an enterprise in one of the contracting states do not fairly reflect the income allocable thereto.

Article 3 (draft convention adopted for the allocation of business income between states for purposes of taxation):

"If an enterprise with its fiscal domicile in one contracting state has permanent establishments in other contracting states, there shall be attributed to each permanent establishment the net business income which it might be expected to derive if it were an independent enterprise engaged in the same or similar activities under the same or similar conditions. Such net income will, in principle, be determined on the basis of the separate accounts pertaining to such establishment. Subject to the provisions of this convention, such income shall be taxed in accordance with the legislation and international agreements of the state in which such establishment is situated.

"The fiscal authorities of the contracting states shall, when necessary, in execution of the preceding paragraph, rectify the accounts produced, notably to correct errors or omissions, or to re-establish the prices or remunerations entered in the books at the value which would prevail between independent persons dealing at arm's length.

"If an establishment does not produce an accounting showing its own operations, or if the accounting produced does not correspond to the normal usages of the trade in the country where the establishment is situated, or if the rectifications provided for in the preceding paragraph can not be effected, or if the taxpayer agrees, the fiscal authorities may determine empirically the business income by applying a percentage to the turnover of that establishment. This percentage is fixed in accordance with the nature of the transactions in which the establishment is engaged and by comparison with the results obtained by similar enterprises operating in the country.

"If the methods of determination described in the preceding paragraphs are found to be inapplicable, the net business income of the permanent establishment may be determined by a computation based on the total income derived by the enterprise from the activities in which such establishment has participated. This determination is made by applying to the total income coefficients based on a comparison of gross receipts, assets, number of hours worked or other appropriate factors, provided such factors be so selected as to ensure results approaching as closely as possible to those which would be reflected by a separate accounting." (League Document C.399.M.204. 1933, II, A(F/Fiscal 76).)

If the separate accounts are unsatisfactory, the tax authorities are expected to try, first, to rectify or to adjust the accounts and, failing this, to determine the income empirically by the percentage of turnover or gross profits method. Only as a last resort are they to make a fractional apportionment of the entire net income of the enterprise.

The soundness of the procedure here outlined is generally recognized throughout the world, not only by accountants but also by business men, lawyers and tax officers. The method of separate accounting effectually eliminates the reporting of a single item of income in more than one jurisdiction; it simplifies the preparation and the verification of tax returns, since only the figures of a single establishment need be considered; and, if honestly used, it produces more accurate results by reducing the zone of uncertainty which is inevitably present in all apportionments. General apportionment, on the other hand, places upon international enterprises the burden of reporting on their world-wide business to many countries with different currencies and laws. The results, moreover, can not be accurate. All apportionment fractions allocate profits in a uniform ratio to all establishments of an enterprise, and yet if there is one certainty it is that the profits of different establishments do vary—in rate as well as in amount. Certain establishments may earn profits while others suffer losses, but an apportionment fraction always assigns profits to all alike.

During the league's investigation of allocation methods, services of great value were rendered by a special committee on international double taxation of the American Institute of Accountants, with which it was my pleasure to be unofficially associated. It was the primary concern of this committee to prevent the adoption of unsound principles of allocation. It was not particularly concerned with detailed methods. The principle which the committee recommended in its statement of April 25, 1931, however, has now been adopted and the time for the development and refinement of methods is at hand. Research on the theoretical aspects of the problem is needed, but even more important is the practical application of methods already known. In the final analysis, each enterprise must be treated as an individual problem.

The concept of taxing each separate establishment as if it were an independent enterprise engaged in the same or similar activities is simple enough, but the application of the principle raises a host of difficulties. It will not be easy to install systems of accounting adequate to convince doubting tax officers that intra-company transactions are priced as if they were made "at arm's length." The evidence, nevertheless, indicates that even now, without the benefit of the draft convention, separate accounts which are honestly and fairly set up are rather generally acceptable to tax authorities.

The Allocation Problem Within the United States

The problems of double taxation and allocation, however, are not restricted to the international field. They arise in the greatest profusion within the United States. To most taxpayers and accountants, indeed, the domestic problems are apt to overshadow the international ones, especially since foreign trade has dwindled to a mere trickle. Some twenty-six states now have income-tax laws, and, of these, twenty-four tax corporate net incomes. Because additional states are adopting the income tax almost every year, the magnitude of the problems to be faced should be evident.

The internal situation is affected by two important factors not present in the international sphere: namely, the practice of doing business with little regard for state lines, and the federal form of government under which presumably sovereign states are bound by a constitution as interpreted by the supreme court. The first factor makes allocation difficult because the economic relationships between states have become both numerous and intricate; the second impedes the process of adjustment which would certainly occur if the power of taxation were centralized in the national government and might occur if the states had treaty-making powers.

The personal income-tax statutes, with only one or two exceptions, follow the federal law and levy a tax on all income originating within the state and on the entire income of residents, regardless of origin. If this practice continues as additional states adopt the income tax, the burden of double taxation will materially increase. The corporate income tax, however, applies as a rule only to income having its origin within the state. Only three or four states, Arkansas, North Carolina, South Carolina, and possibly Mississippi, have provisions under which domestic corporations may be taxed on their entire net incomes from sources both within and without the state. Every state law levying a tax on corporate net incomes, however, must provide some means for making allocations, and it is this problem which will now be considered.

In the United States general apportionment has been by far the most popular method of allocation. Most of the states, however, are willing to accept returns based on a separate accounting if the taxpayer can show that his accounts do reasonably reflect the income having its origin within the state. The prevalent use of apportionment fractions is due not so much to a general preference for this method as it is to the lack of any other that can be generally applied. A number of tax administrators prefer the method of separate accounting in theory, but the flow of business across state lines makes its use difficult and in some cases impossible. Apportionment fractions have been introduced, therefore, as a matter of administrative necessity. While these fractions will not, except by coincidence, allocate the income of any given corporation accurately to the various states in which it is earned, they will, if uniform, effect a reasonable apportionment on the average. Let me emphasize the point—they can be made to operate reasonably on the average, but they can not be made to produce accurate allocations of the incomes of individual enterprises. This fact, in the light of recent supreme court decisions, is of considerable importance.

Various committees of the National Tax Association have devoted much time to the search for an ideal apportionment fraction. All apportionment fractions, however, merely serve to cut the Gordian knot of complex economic relationships; therefore, in the theoretical sense there can be no such thing as an ideal fraction. The best fraction is the one which most nearly meets the following practical qualifications:

1. Uniformity.

2. Reasonableness.
3. Simplicity and ease of administration.
4. Constitutionality.

As a means of eliminating double taxation, uniformity is by far the most important. Though the importance of uniformity has long been recognized, until recently little progress had been made toward securing it. There is, however, one formula which stands a fair chance of general adoption, namely, the Massachusetts formula. It has been used with general satisfaction to both taxpayers and the state for over ten years. Five states have already adopted it, and six others are using fractions which do not differ greatly in result. The formula may be stated thus:

$$\frac{\underline{\frac{\text{Mass. tangibles}}{\text{Total tangibles}} + \frac{\text{Mass. payrolls}}{\text{Total payrolls}} + \frac{\text{Mass. sales}}{\text{Total sales}}}}{} \times \begin{array}{c}\text{Allocable}\\ \text{net income}\end{array} = \begin{array}{c}\text{Mass.}\\ \text{income}\end{array}$$

In arriving at the amount of allocable net income, the income reported on the federal tax return is adjusted for differences between federal and state definitions of taxable income and for such items as interest, dividends and capital gains which are allocated directly to sources within and without the state.

This formula takes a middle ground between the extreme fractions which would apportion the total income on the basis of tangible property alone, as in Connecticut, or on the basis of sales alone, as in Tennessee. It is simple, easy to administer and reasonable on its face. Tangible property and payrolls within and without the state can be easily determined. The sales factor may offer some difficulty in this respect, but apparently it must be included for political reasons. The general adoption of the Massachusetts formula would unquestionably constitute an important advance in the campaign to eliminate double taxation.

Were it not for the constitution and the United States supreme court, it might be feasible to concentrate all effort into the attempt to secure uniform methods of apportionment among the states. The apportionment of the net income reported to the federal government is so much simpler than separate accounting that it might well be preferred by taxpayers, as well as tax officers, if uniform methods were once introduced. The Supreme Court, however, in *Hans Rees Sons Co.* v. *North Carolina*, 51 S. Ch. 385, has ruled that no apportionment, no matter how fair the fraction may be in its general application, will stand in any individual case in which the taxpayer can prove that the income actually originating within a state is less than that apportioned thereto by the fraction. This rule is perfectly sound, but nevertheless it places the states in a difficult position. They can not depend entirely on apportionment fractions because of the rule. They can not compel all returns to be made on the basis of separate accounts because such accounts simply are non-existent in most cases. And if they accept returns based on either a general apportionment or a separate accounting, the taxpayers will naturally take the more favorable option and an unascertainable amount of corporate net income will avoid state income taxes altogether.

The position of the accountant, however, is reasonably clear. If the statutory method of apportionment in any state allocates to that state substantially more than the net income actually earned therein, he should prepare the tax return on the basis of a separate accounting for the establishment operating within the state. In so doing, the accountant will not only be serving the interests of his client but he will also be contributing something toward a final solution of the problems of allocation. The profession should not, and we believe does not, condone the use of biased accounts or other devices to evade the payment of a reasonable tax, but certainly it could not be a violation of even the strictest code of ethics to insist on reporting the taxable income actually derived from operations within a given state.

The term "separate accounting" is somewhat vague and does not refer to any particular method. It carries the implication that the different branches or divisions of an enterprise are to be treated as nearly as possible like independent business units. To the author, however, separate accounting is simply a method for determining the income attributable to particular establishments with a maximum of direct allocation and a minimum of apportionment. In other words, it is place accounting based on direct charges and credits for goods and services given and received. This requires the use of quoted market prices and other independent criteria wherever possible as means of reducing or eliminating the amount of income or expense which would otherwise have to be divided by apportionment.

Items which can be specifically assigned to one particular state are rentals, royalties, interest and dividends received, capital gains on property which has a fixed situs, etc. There is another class of income which can be specifically assigned: namely, income from ventures not directly connected with the principal business being carried on in two or more states. It has been held, for instance, that where one company owns and operates two distinct lines of railroad, one within and the other without the state, the state can not apply its allocation formula to the entire net income of the company, but must tax only the income of the line within the state. (*Piedmont & N. R. Co.* v. *Query*, 56 F. (2d) 172.) Likewise, in the case of *Palmolive Company* v. *Conway*, 43 F. (2d) 226, it was held that Wisconsin could tax a fair share of the profits from the manufacture and sale of soap, partly within and partly without the state, but could tax no part of the profits of an advertising agency which the company maintained entirely without the state.

After all possible items have been directly allocated in any given case, the remaining net income will be only that amount which in the language of the courts is ascribable to a unitary business. Such income is a true joint product of operations in two or more states. Even this income can, however, be directly allocated by separate accounting where quoted market prices are available for the product in the different stages of production and distribution. This contention is supported by at least three decided cases: *Standard Oil Co.* v. *Thorensen*, 29 F. (2d) 708, North Dakota; *Standard Oil Co.* v. *Wis. Tax Comm.*, 197 Wis. 630; 223 N. W. 85; *Buick Motor Co.* v. *Milwaukee*, 43 F. (2d) 385, Wisconsin.

The evidence in the two oil company cases showed that the profits earned on sales in each of the states could be determined accurately by charging current market prices for oil to the distributing branches. The courts held that the states could therefore tax no part of the profits due to the functions of producing or refining. They could not, in other words, apply an allocation fraction to total company income. The results in the Buick case were similar though the details were different. The manufacturing company in Michigan had organized a wholly owned sales company which had agreed to handle the distribution of Buick automobiles throughout the world for a fixed annual profit which was merely nominal in amount. Since Wisconsin's apportioned share of this profit was clearly unreasonable as the taxable profit on the sale of several million dollars' worth of automobiles, the tax commission audited the accounts of the distributing agency within the state and found that the amount of profit from Wisconsin operations could be determined by charging cars to the agency at regular dealer prices. The commission found, moreover, that the company actually made the charges on this basis in its own accounting and arbitrarily reduced the profit to the agreed amount by adjustments at the end of each year. Needless to say, the court upheld the tax commission in its determination. These cases make it clear that the courts will compel, or at least have compelled, tax commissions to recognize separate determinations of profit when apportionment is manifestly unjust to the taxpayer. They will also uphold an assessment based on an examination of the separate accounts of a branch where it is clear that only thus can a proper allocation of income be made.

The question still remains, however, whether allocations can be made by separate accounting if there are no quoted market prices or recognized dealer prices. In my opinion, allocations by accounting methods can still be made in many instances. To illustrate, let us suppose that a Rhode Island manufacturing company effects sales through branches in Massachusetts. If it bills its product to these branches at manufacturing cost, including normal factory overhead, it is obvious that the profit allocable to Massachusetts can not exceed the gross profit on Massachusetts sales less the operating expenses of the branches in Massachusetts. If nothing remains, no profit can properly be assigned to Massachusetts even though the enterprise as a whole is profitable and would, under the apportionment method, have to pay a substantial tax in Massachusetts. The state tax commission would, no doubt, recognize this fact. If a profit remains, however, after deducting the Massachusetts expenses, only part of it should be taxed there. The other portion represents the so-called manufacturing profit attributable to operations in Rhode Island.

This problem of making a separate determination of manufacturing profit and selling profit is a fascinating one. Unfortunately it can never be completely solved, for profit, after all, is the result of the manufacture and the sale of goods, not the result of either function alone. Profit of this kind must be apportioned unless an intermediate price is fixed on the open market or by the customary margins allowed to independent dealers. In making this apportionment, however, it is not necessary to apportion the entire net income of the business. A much more accurate apportionment can be made on the basis of the component elements entering into the ultimate selling price of the goods. Let us suppose that the Rhode Island Manufacturing Company sold $1,000,000 worth of goods through its branches in Massachusetts, and another $1,000,000 worth through its branches in Wisconsin. A careful analysis of these sales, we may assume, reveals the following facts:

	Mass. sales	*Wis. sales*
Sales	$1,000,000	$1,000,000
Less cost of materials	300,000	300,000
Value added in manufacture	$ 700,000	$ 700,000
Conversion cost	$ 400,000	$ 400,000
Distribution cost	200,000	400,000
Total operating costs	$ 600,000	$ 800,000
Net profit (loss)	$ 100,000	($ 100,000)

Since two-thirds of the operating costs assignable to the goods sold through Massachusetts branches were attributable to the manufacturing function and one-third to the selling function, it seems entirely fair to allocate two-thirds of the profit, or $66,667, to Rhode Island and one-third, or $33,333, to Massachusetts, assuming that all distribution costs were incurred in Massachusetts. Whether the loss on Wisconsin sales should be divided equally between the factory and the sales branches or assigned entirely to the state of sale is a moot question. It is clear, however, that no profit whatever should be allocated to Wisconsin. Paradoxically enough, the Massachusetts formula, and other general apportionment fractions as well, would ordinarily assign more profit to Wisconsin than to Massachusetts. The sales were identical, tangible property may well have been the same, and salaries and wages in Wisconsin almost certainly exceeded those in Massachusetts since the cost of distribution in Wisconsin was twice as high.

The suggested method for apportioning the joint profit of two or more establishments on the basis of operating costs applicable to the goods jointly handled, thus has one important advantage over all general apportionment fractions. It can allocate profits to some branches and losses to others closely in accordance with actual results, while all general apportionment formulæ necessarily spread profits evenly over all territories. It does, however, require a first-class system of cost accounting, while the other formulæ may be applied to the figures supplied by almost any general accounting system.

In conclusion, the present situation with respect to allocation may be briefly summarized as follows: (a) The method of separate accounting has been definitely adopted by the League of Nations after a far-reaching study of conditions and methods throughout the world; (b) general apportionment on the basis of statutory formulæ is still the prevailing method in use by American states having corporate income-tax laws; (c) but the supreme court of the United States has sustained the right of a taxpayer to make a return on the basis of a separate accounting whenever a statutory fraction results in the allocation of more income to the taxing state than was actually earned therein. The possibilities of separate accounting as a method of allocation thus merit further investigation. If accountants succeed in developing and applying satisfactory methods for the direct allocation of income, they will have contributed much toward the reduction of the present burden of double taxation.

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Students' Department

H. P. BAUMANN, *Editor*

AMERICAN INSTITUTE EXAMINATIONS

[NOTE.—The fact that these answers appear in THE JOURNAL OF ACCOUNTANCY should not cause the reader to assume that they are the official answers of the board of examiners. They represent merely the opinions of the editor of the *Students' Department.*]

EXAMINATION IN ACCOUNTING THEORY AND PRACTICE—PART II

May 18, 1934, 1:30 P. M. to 6:30 P. M.

Solve problems 1, 2, 3 and 4 and two of the three problems, 5, 6, 7

No. 3 (15 points):

Compute the federal income tax of Simon Marks, retailer, for the calendar year 1933. His income and expenses for the year were as follows:

Sales		$91,000
Dividends received		870
Profit on sales of real estate, securities, etc.		2,000
Interest received		900
Purchases	$74,000	
Salaries paid	10,400	
Rent	3,000	
Light	1,200	
Donations	280	
Interest paid	1,650	
Advertising	1,350	
Taxes and licences	520	
Delivery expense	600	

Upon inquiry, you learn the following:

(a) The inventory of goods on hand at January 1, 1933, was $21,000, and at December 31, 1933, was $18,500.

(b) The dividends were received from the following sources:

Domestic corporations which are not exempt from the income tax	$570
Foreign corporations	300
Total	$870

The dividends declared by the domestic corporations on Mr. Marks' stock were $600. However, he received only $570. The remaining $30 were deducted and withheld by the payor corporations as the federal tax on dividends.

(c) The interest received consisted of:

Board of education, city of Chicago bonds	$212.50
Federal farm loan bonds	225.00
Foreign government bonds	212.50
Bonds containing a 2% tax-free covenant clause	250.00
Total	$900.00

(d) The salaries paid included a salary of $5,200 paid to Simon Marks.

(e) The donations consisted of the following:

Community chest	$ 50
Democratic committee	100
The Crusaders	10
Salvation Army	10
Red Cross	25
An indigent relative	25
Christmas bonus to employees	60
Total	$280

(f) The taxes and licences paid were as follows:

Personal property tax	$ 50
Retailers' licence	100
Street-improvement tax	100
Real-estate tax on residence	210
Automobile licences	20
Federal cheque tax	20
Tax on club dues	20
Total	$520

(g) The profits from sales of securities, grain, etc., were as follows:

Profit from sale of grain		$2,000
Profit from sale of unimproved real estate		2,000
Total profit		$4,000
Loss from sale of securities which were owned less than two years at time of sale:		
Foreign government bonds	$1,000	
Stock of domestic corporations	1,000	2,000
Net profit		$2,000

(h) Mr. Marks was married and living with his wife and had two dependent children under 18 years of age throughout the entire year.

Solution:

Income:

Income from business—schedule A		$1,320.00	
Interest on tax free covenant bonds		250.00	
Interest on foreign government bonds		212.50	
Profit on sale of capital assets (schedule B)		3,000.00	
Dividends on domestic corporations		600.00	
Dividends on foreign corporations		300.00	$5,682.50
Deductions:			
Taxes paid:			
Personal property	$ 50.00		
Real-estate	210.00		
Automobile licences	20.00		
Tax on club dues	20.00		
Tax on dividends	30.00	$ 330.00	
Contributions		85.00	415.00
Net income			$5,267.50

Credits:		
Dividends (subject to surtax only)	$600.00	
Personal exemption	2,500.00	
Credit for dependents	800.00	3,900.00
Net income subject to normal tax		$1,367.50

Tax:	
4% of $1,367.50	$54.70
Less: income tax paid at source (2% of $250.00)	5.00
Tax payable	$49.70

Regarding contributions, section 23 of the act of 1932 says in part: "in computing net income there shall be allowed as deductions: . . .

"(n) . . . In the case of an individual, contributions or gifts made within the taxable year to or for the use of: . . .

"(2) a corporation, or trust, or community chest, fund, or foundation, organized and operated exclusively for religious, charitable, scientific, literary, or educational purposes, or for the prevention of cruelty to children or animals, no part of the net earnings of which inures to the benefit of any private shareholder or individual."

Under this section, the following are deductible:

Community chest	$50.00
Salvation army	10.00
Red cross	25.00
Total	$85.00

The payment to the individual (indigent relative) of $25 is not deductible.

Article 262, regulations 77 says in part: "Sums of money expended for lobbying purposes, the promotion or defeat of legislation, the exploitation of propaganda, including advertising other than trade advertising, and contributions for campaign expenses, are not deductible from gross income."

Under this section, the payments to the following are not deductible:

Democratic committee	$100.00
The Crusaders	10.00
Total	$110.00

The Christmas bonus to employees of $60 should be considered as extra compensation to the employees and is, therefore, deductible. (See I. T. 1600; C. B. June 1923, p. 184.)

Street-improvement tax of $100 is considered as a capital expenditure and is not deductible for tax purposes. The tax on dividends ($30) withheld by payor corporations is added back to the net amount of dividends received, and is deducted as a tax.

Schedule A

Income from business

Sales		$91,000.00
Cost of sales:		
Inventory, January 1, 1932	$21,000.00	
Purchases	74,000.00	
Total	$95,000.00	
Less: inventory, December 31, 1933	18,500.00	76,500.00
Gross profit		$14,500.00
Less: deductible expenses:		
Salaries paid (exclusive of salary paid to Mr. Marks)	$ 5,200.00	
Additional compensation	60.00	
Rent	3,000.00	
Light	1,200.00	
Interest paid	1,650.00	
Advertising	1,350.00	
Delivery expense	600.00	
Retailers' licence	100.00	
Federal cheque tax	20.00	13,180.00
Net income from business		$ 1,320.00

Schedule B

Profit on sale of capital assets

Profit from sale of grain	$2,000.00
Profit from sale of unimproved real estate	2,000.00
Total profit	$4,000.00
Loss from sale of foreign government bonds	1,000.00
Net profit	$3,000.00

NOTE.—Section 23 (r) of the act of 1932 states, in part: "(1) Losses from sales or exchanges of stocks and bonds (as defined in sub-section (t) of this section) which are not capital assets (as defined in section 101) shall be allowed only to the extent of the gains from such sales or exchanges." Sub-section (t) defines stocks and bonds but specifically excludes those of a government or political subdivision thereof. Section 101 defines capital assets as those which were held for more than two years. Hence, in this problem, the profit on the sale of grain and unimproved real estate may be reduced by the loss on the sale of the government bonds, and not by the loss on the stock of the domestic corporations, which stock was held for less than two years. This latter loss may be deducted only from profits arising from the sale of stocks and bonds as defined in section 23 (t) held for less than two years.

No. 4 (15 points):

Charles Black & Co., a corporation, had a factory whose output was absorbed by two customers.

The president and the treasurer each signed cheques, only one signature being necessary. The president bought the raw materials and supplies. The treasurer kept the books, handled the receipts and drew the cheques. Incidentally, he was also receiving teller in one of the local banks patronized by the company.

The accounts of Charles Black & Co. had never been audited until the president demanded an audit which developed at once into an investigation.

All the paid cheques returned by the banks were on hand and available to the auditor, and the cheques received from the two customers were produced on request. After a brief examination of the latter, inquiries revealed that the treasurer had a personal account in his own bank and another in a large bank in an adjacent city.

It was found that $65,000 of customers' cheques had not been credited to them nor entered anywhere on the books (except $10,000 mentioned below). The treasurer had endorsed the cheques for the company in blank in his own handwriting and used them himself by passing them through bank accounts other than those of the company, as evidenced by later endorsements.

There were cheques aggregating $25,000, which had been credited to customers' ledger accounts but not entered in the cashbook nor deposited in the company's bank account. These were similarly endorsed and used.

Cash sales of old machinery and scrap amounting to $1,200 had been made and entered, but the proceeds were retained by the treasurer.

A mortgage was placed on the factory for $10,000 and the company received the money in two instalments of $5,000 each. The full amount was entered in the cashbook as received and credited to mortgage account in the ledger, but only $5,000 was placed in the bank. The other $5,000 was taken by the treasurer, for which he gave his note. An entry crediting cash and charging notes receivable was made by him. Several months later he discounted at the bank a company note for $5,000 to the credit of the company, charging cash as if coming from him and crediting notes receivable. He destroyed his own note. When the company's note was due the bank charged it to the company, but no entry whatsoever was made on the books. The treasurer destroyed this note also. The president of the company knew of the mortgage but denied all knowledge of the notes.

Later another $10,000 was borrowed on the mortgage, but no entry was made on the books. The treasurer turned this money to his own uses. About a month later one customer's cheque for $10,000, as above mentioned, was credited to the mortgage account instead of being credited to the customer.

On the other hand, $30,000 in all was deposited in the bank at various dates to the credit of the company by the treasurer himself, without entry on the books.

Payments to creditors and for salaries and wages and other expenses for the past year, by quarters, aggregated as follows:

	Per cash book	Per cheque book stub	Per cheques
Accounts payable—1st quarter.........	$ 3,225	$ 2,525	$ 1,725
" " 2nd "	3,000	2,500	2,000
" " 3rd "	8,250	7,250	6,250
" " 4th "	4,800	4,300	3,500
	$19,275		$13,475
Cash for salaries, wages, etc.:			
" " " 1st quarter..........	3,100	3,500	4,100
" " " 2nd "	5,600	5,600	6,600
" " " 3rd "	1,500	2,000	2,500
" " " 4th "	2,700	4,500	5,500
	$32,175	$32,175	$32,175

All correspondence from creditors relative to short payments had been suppressed by the treasurer.

If the candidate finds any evidence of shortage in the figures next above he may consider them part of the defalcation.

Prepare a statement showing briefly the several items making up the total defalcation. Disregard interest. No journal entries are wanted.

Solution:

Statement showing the details of the defalcation of the treasurer of Charles Black & Co.

Receipts appropriated by the treasurer:	
Customers' cheques, not entered, nor deposited	$ 55,000
Customers' cheques, entered, but not deposited	25,000
Cash proceeds from sales of old machinery	1,200
Company's note issued; proceeds applied against treasurer's note given to the company	5,000
Proceeds from additional loan on mortgage	10,000
Cheques issued to cash in excess of payrolls, etc.	5,800
Total	$102,000
Less: amounts deposited in the bank to the company's credit, but not recorded	30,000
Net amount of defalcation	$ 72,000

No. 5 (12 points):

From the following balance-sheets of the R Company and other information given below prepare a statement of resources and their application in the year 1933:

BALANCE-SHEETS OF THE R COMPANY

Assets	December 31, 1932	December 31, 1933
Land and buildings	$ 450,000	$ 750,000
Machinery	200,000	400,000
Tools	40,000	80,000
Goodwill	200,000	230,000
Investments	95,000	
Inventories	400,000	375,000
Accounts receivable	175,000	250,000
Unexpired insurance	3,000	4,000
Cash	25,000	20,000
	$1,588,000	$2,109,000
Liabilities		
Capital stock	$ 800,000	$1,100,000
Bonds	350,000	500,000
Notes payable	70,000	80,000
Accounts payable	145,000	125,000
Accrued interest	7,000	11,000
Accrued taxes	4,000	6,000
Surplus	212,000	287,000
	$1,588,000	$2,109,000

During the year a dividend of 4 per cent. was declared and paid on the stock outstanding at the beginning of the year. Seven thousand dollars was provided for the depreciation of the buildings; $16,000 for machinery and $4,000 for tools. The bonds were sold at par, the stock was sold at 90 and the difference was charged to goodwill account.

Solution:

Schedule 1

R COMPANY

Statement of working capital and prepaid expenses

	December 31, 1932	December 31, 1933	Increase	Decrease
Current assets:				
Inventories	$400,000	$375,000		$25,000
Accounts receivable	175,000	250,000	$75,000	
Cash	25,000	20,000		5,000
Total current assets	$600,000	$645,000		
Current liabilities:				
Notes payable	$ 70,000	$ 80,000		10,000
Accounts payable	145,000	125,000	20,000	
Accrued interest	7,000	11,000		4,000
Accrued taxes	4,000	6,000		2,000
Total current liabilities	$226,000	$222,000		
Working capital	$374,000	$423,000		
Unexpired insurance	$ 3,000	$ 4,000	1,000	
Increase in working capital and prepaid expenses				50,000
Totals			$96,000	$96,000

R COMPANY

Statement of application of funds for the year ended December 31, 1933

Funds provided:			
By profits:			
Net profit, per books		$107,000	
Add charges to profit and loss, not requiring funds:			
Depreciation—buildings	$ 7,000		
Depreciation—machinery	16,000		
Depreciation—tools	4,000	27,000	$134,000
By sale of capital stock:			
Par value		$300,000	
Less: discount charged to goodwill		30,000	270,000
By sale of bonds of R Company			150,000
By sale of investments			95,000
Total funds provided			$649,000

R Company
Application of funds—working papers

	December 31,		Year's excess		Adjustments		Working capital		Funds	
Assets	1932	1933	Debit	Credit	Debit	Credit	Increase	Decrease	Applied	Provided
Land and buildings	$ 450,000	$ 750,000	$300,000		(b) $ 7,000				$307,000	
Machinery	200,000	400,000	200,000		(c) 16,000				216,000	
Tools	40,000	80,000	40,000		(d) 4,000				44,000	
Goodwill	200,000	230,000	30,000			(e) $ 30,000				
Investments	95,000			$ 95,000						$ 95,000
Inventories	400,000	375,000		25,000				$25,000		
Accounts receivable	175,000	250,000	75,000				$75,000			
Unexpired insurance	3,000	4,000	1,000				1,000			
Cash	25,000	20,000		5,000				5,000		
	$1,588,000	$2,109,000								
Liabilities and capital										
Capital stock	$ 800,000	$1,100,000		300,000	(e) 30,000					270,000
Bonds	350,000	500,000		150,000						150,000
Notes payable	70,000	80,000		10,000				10,000		
Accounts payable	145,000	125,000	20,000				20,000			
Accrued interest	7,000	11,000		4,000				4,000		
Accrued taxes	4,000	6,000		2,000				2,000		
Surplus	212,000	287,000		75,000	(f) 107,000	(a) 32,000				
	$1,588,000	$2,109,000	$666,000	$666,000						
Cash dividends paid					(a) 32,000				32,000	
Depreciation written off:										
Buildings						(b) 7,000				
Machinery						(c) 16,000				134,000
Tools						(d) 4,000				
Net profit for the year						(f) 107,000				
Increase in working capital								50,000	50,000	
					$196,000	$196,000	$96,000	$96,000	$649,000	$649,000

Note.—These working papers are not required by the examiners in solving this problem, and are presented here for explanatory purposes only.

Funds applied:		
To purchase of fixed assets:		
Land and buildings...........................	$307,000	
Machinery..................................	216,000	
Tools..	44,000	$567,000
To payment of dividend (4%)...................		32,000
To increase in working capital and prepaid expenses (schedule 1)................................		50,000
Total funds applied.........................		$649,000

No. 6 (12 points):

A machine costing $256 is estimated to have a life of four years, with a residual value of $16.

Prepare a statement showing the annual charge for depreciation according to each of the following methods: (a) straight line; (b) constant percentage of diminishing value; (c) annuity method.

Assume the rate of interest to be 10%.

Solution:

The symbols used in the formulae of the solution follow:

D = Annual depreciation charged
C = Cost ($256)
S = Residual value ($16)
n = Number of periods (four years)
p = Present value of $1 due 4 years hence at 10%
P = Present value of an annuity of 1 for 4 years at 10%

(a) the formula for computing the annual charge for depreciation by the straight line method is:

$$D=\frac{C-S}{n}$$

Applying the data given in the problem, we have

$$D=\frac{\$256-\$16}{4} \text{ or } \$60$$

Table of depreciation—straight line method

End of year	Depreciation	Accumulated depreciation reserve	Carrying value
			$256.00
1..............................	$60.00	$ 60.00	196.00
2..............................	60.00	120.00	136.00
3..............................	60.00	180.00	76.00
4..............................	60.00	240.00	16.00

(b) The formula for computing the rate of depreciation by the "constant percentage of diminishing value" method is:

$$r=1-\sqrt[n]{S\div C}$$

Applying the data given in the problem, we have

$$r = 1 - \sqrt[4]{\frac{\$16}{\$256}} \text{ or } 1 - \frac{2}{4} \text{ or } 50\%$$

Table of depreciation—uniform rate on diminishing value (rate 50%)

Year	Depreciation	Accumulated depreciation reserve	Carrying value
			$256.00
1	$128.00	$128.00	128.00
2	64.00	192.00	64.00
3	32.00	224.00	32.00
4	16.00	240.00	16.00

(c) The formula for computing the annual charge for depreciation by the annuity method is:

$$D = \frac{C-(S \times p)}{P}$$

The computations to ascertain the present value of $1 for 4 years at 10 per cent., and the present value of an annuity of 1 for 4 years at 10 per cent. follow:

$$\begin{array}{l} 1.10 \\ 1.10 \\ \hline 1.21 \\ 1.10 \\ \hline 1.331 \\ 1.10 \\ \hline \end{array}$$

1.4641 = the amount of 1 for 4 years at 10%
1 ÷ 1.4641 = .683, the present value of 1 for 4 years at 10%
1 − .683 = .317, the compound discount
.317 ÷ .10 = 3.17, the present value of an annuity of 1 for 4 years at 10%

Applying these present values and the data given in the problem, we have

$$D = \frac{\$256.00 - (\$16.00 \times .683)}{3.17}, \text{ or } \frac{\$256.00 - \$10.93}{3.17}, \text{ or } \$77.31$$

Table of depreciation—annuity method

Year	Depreciation	Interest credits	Accumulated depreciation reserve	Carrying value
				$256.00
1	$77.31	$25.60	$51.71	204.29
2	77.31	20.43	56.88	147.41
3	77.31	14.74	62.57	84.84
4	77.31	8.48	68.83	16.01

No. 7 (12 points):

The H. Manufacturing Company has been losing money for several years and intends to reorganize.

From the following list of accounts as at December 31, 1933, and other information given below prepare a statement of affairs also showing the amounts that will be realized and the estimated losses on realization:

Advances to employees	$ 2,657.44
Cash	4,204.67
Creditors	104,231.33
Creditors, preferred	1,716.20
Customers	200,676.93
Capital stock, common	200,000.00
Capital stock, preferred	150,000.00
Capital stock subscriptions	96,400.00
Deficit	133,893.43
Furniture and fixtures	9,197.26
Goodwill	75,000.00
Inventories	75,693.07
Notes payable	189,663.51
Notes receivable	11,462.50
Plant and machinery	33,860.49
Real estate	2,565.25

The original capital stock was $150,000 preferred and $100,000 common, which was fully paid. The subsequent authorized increase of $100,000 common stock is unpaid, except $3,600. The remaining $96,400 is due from wholly insolvent subscribers. The company has assigned $24,072.08 of its customers' accounts, worth their face value, to one of its creditors and estimates that it still has an equity in them of $2,661.81, although this fact does not appear on the books. Of the remaining customers' accounts $46,706.00 are barred by the statute of limitations and $36,584.03 are more than doubtful. The remaining assets are estimated to be worth as follows:

Inventories	$ 9,996.42
Plant and machinery	22,088.38
Real estate	1,830.25
Furniture and fixtures	6,697.26
Notes receivable	9,823.40

Solution:

(See statement on next page)

THE H. MANUFACTURING COMPANY

Deficiency account—December 31, 1933

Estimated loss on:		Capital stock:	
Advances to employees	$ 2,657.44	Preferred	$150,000.00
Customers:		Common	200,000.00
Barred by statute	46,706.00	Deficiency to creditors	123,583.76
Uncollectible	36,584.03		
Capital stock subscriptions	96,400.00		
Furniture and fixtures	2,500.00		
Goodwill	75,000.00		
Inventories	65,696.65		
Notes receivable	1,639.10		
Plant and machinery	11,772.11		
Real estate	735.00		
Deficit	133,893.43		
	$473,583.76		$473,583.76

THE H. MANUFACTURING COMPANY

Statement of affairs—December 31, 1933

Book value	*Assets*		Expected to realize
	Assets pledged with fully secured creditors:		
$ 24,072.08	Accounts receivable	$24,072.08	
	Less: accounts payable—contra	21,410.27	$ 2,661.81
	Free assets:		
2,657.44	Advances to employees		
4,204.67	Cash		4,204.67
176,604.85	Accounts receivable:		
	$ 46,706.00 Barred by statute of limitations		....
	36,584.03 More than doubtful		....
	93,314.82 Collectible		93,314.82
	$176,604.85 Total (not pledged)		
9,197.26	Furniture and fixtures		6,697.26
75,000.00	Goodwill		....
75,693.07	Inventories		9,996.42
11,462.50	Notes receivable		9,823.40
33,860.49	Plant and machinery		22,088.38
2,565.25	Real estate		1,830.25
96,400.00	Capital stock subscriptions		....
	Total free assets		$150,617.01
	Deduct: preferred creditors		1,716.20
	Net free assets		$148,900.81
	Deficiency to unsecured creditors		123,583.76
$511,717.61			$272,484.57

Book value	*Liabilities and capital*		Expected to rank
$ 1,716.20	*Preferred creditors*—deducted contra		
	Fully secured creditors:		
21,410.27	Accounts payable—deducted contra		
	Unsecured creditors:		
82,821.06	Accounts payable		$ 82,821.06
189,663.51	Notes payable		189,663.51
	Capital:		
	Preferred stock	$150,000.00	
	Common stock	200,000.00	
	Total	$350,000.00	
	Less: deficit	133,893.43	
216,106.57	Net capital	$216,106.57	
$511,717.61			$272,484.57

Correspondence

THE QUESTION OF PROPHECY

Editor, THE JOURNAL OF ACCOUNTANCY:

SIR: I have just read your editorial on page 89 of the August issue of THE JOURNAL OF ACCOUNTANCY.

I am thoroughly in accord with your position that an accountant should not prophesy, but I am not at all in accord with the reasons you give for it. I particularly dissent from such statements as the following:

> "The accountant deals with the past. He has nothing whatever to do with the future."

and

> "accountancy has always been the science of things done."

To confirm my belief that this is not the accepted point of view of the leaders of the accounting profession, I have turned to *Accounting Terminology*, published under the auspices of the Institute, and I find the following definitions:

> "Accountancy: The profession dealing with methods of recording business transactions, with the correct statement of financial affairs, with the guidance of business men in interpreting their accounts, and with the application of sound accounting principles to future development of business, as in the preparation of budgets.
>
> The objective is the statement of financial affairs in such a manner as to give due effect to every material factor, making available all the light that past accounts can give to assist in planning for the future.
>
> It consists of two processes: synthesis, such as is used in building up or designing accounts; and auditing, the object of which is to analyze and verify the results submitted."
>
> "Accountant: One skilled in the practice of accountancy."

The statement that the "application of sound accounting principles to future development of business, as in the preparation of budgets" is a feature of accountancy certainly shows the substantial thought among the leaders of the profession that accountancy does properly look to the future and does have its proper place in the preparation of budgets. There is here clear recognition that accounting is not solely concerned in dealing with the past and is not simply the science of things done.

Objections to prophecy I think are found otherwise than in a conception that the accountant should merely deal with the past.

Perhaps part of our trouble rests in the definition of "prophecy." If we take the primary definition—"A prediction made under divine influence and direction" (*The Practical Standard Dictionary*)—or if we take a looser definition of "foretelling the unknown"—we shall, I think, all recognize that this has no place in accountancy. This, I think, is not true if we use the term simply as synonymous with "prediction." To some extent the accountant, as much as the chemist or other scientist, may make his predictions.

A chemist may predict the results of bringing together certain elements under certain conditions and say what will or will not result if other elements are introduced under the same or changed conditions. He may thus rightly speak, and speak as a chemist, regarding what will happen in the future so long as he is speaking of those features concerning which his knowledge and experience qualifies him to speak.

There are matters the accountant may state with no less certainty as to the future than as to the past. The fact that 2 and 2 are 4 will apply to any future transaction as well as to any that is past, and the accountant I think may properly so state. I think he may also properly state that if a man has $100 to account for and shall appropriately spend $10 of it, there will remain $90 for which he is still accountable. Questions of this kind, but usually in much more complicated form, do come to the accountant, and I think he may properly answer them without attempting to distinguish whether they relate to future or past transactions.

In the field of recommendations, the accountant may go even more broadly into future questions than he would in the field of prediction. Take, for example, the question of setting up a petty cash fund, where the accountant is asked his opinion as to the appropriate amount to be provided. If he finds that the usual amount of petty cash disbursements to be made will run from $100 to $150 a week, with no apparent probability that they will exceed this amount, and with such an organization as would make the signing of reimbursing cheques at any time readily practicable, he may properly, I think, based on his knowledge and experience as an accountant, express his opinion that a petty-cash fund of $200 should be ample.

In fact, we find a long series of varied business affairs where proper judgment can only be exercised by bringing the principles of accountancy to bear on their solution. Budgets clearly come within this class. I have seen case after case where improper and misleading budgets were prepared because of some violation of basic principles of accounting. The budget of a large concern really involves as much accounting as does a statement of its past accounts. It may even require a keener and more able accountant to detect accountancy errors in budget preparation than it requires to detect similar errors in the accounts of past transactions. Unless we admit that accountants may well deal with accountancy matters which relate to the future, as well as those which relate to the past, we should deny to those engaged in budget preparation the accounting assistance which they must have for the successful conclusion of their important work.

We come then to the question of the large amount of collateral endeavor which the accountant finds open to him because he is skilled in accounting and because he has a knowledge and experience which has come to him in connection therewith. Take, for example, the work of installing an accounting system. The accountant is here bringing to bear his knowledge of accountancy and also his knowledge of men—the amount of work which they can do, and how they can best do it—and his estimate from the best sources available to him of the probable requirements for the future. Based on these he makes his recommendations as to the records and organization which he believes will meet the future requirements. I am quite ready to admit that in so doing he goes far beyond the use of mere accounting knowledge. He must use a large amount of common sense, judgment of men and affairs and much psychology. But all of this, I think, is as much a proper part of the work of an accountant as it is for an engineer in building a bridge to give due consideration to its proper appearance, to its location as to probable traffic utility, to the cost of materials and to the management of his workmen. The engineer will rightly recognize that all of these are involved in the application of engineering science to human needs. The accountant, I think, may no less recognize and try to meet the problems involved in adapting accounting science to business service. Where there is work which needs to be done and which can only be properly done by the use of accounting knowledge and experience, I believe it properly falls within the sphere of the accountant.

Let me here revert to the letter which called forth your editorial in which reference is made to the "prophecy" of the doctor or the lawyer. Thoughtful doctors and lawyers do not lightly indulge in prophecy. They are very reluctant to try to foretell the unknowable. The doctor does not lightly prophesy the success of his operations. Read a lawyer's opinions and you will find how loath he is to state with certainty the result of a suit. Yet the doctor may recommend an operation, or the lawyer may recommend a suit. In thus bringing their professional knowledge and experience to bear on the situation which confronts them and in stating their opinion as to the appropriate action to be taken, they are not attempting to prophesy. I think both of these professions would agree that their members should not attempt to predict the unknowable, but that does not bar the members of these professions from making recommendations which only those skilled in medicine or law can wisely make. Similarly, I think the accountant may properly use his knowledge and experience as a basis for recommending a course of action where such determination must be made by one having accounting knowledge and experience.

Now directly as to budgets. In my conception the budget is not and should never be represented as a prophecy. It is rather a plan or program of action, and may be, and often is, made an authorization for action. Budgets which are conceived as attempts to foretell the future are apt to fail of such a purpose. The budget which is conceived as a plan or program of action or is considered as an authorization for certain expenditures, or for certain expenditures as against certain receipts, can be made to work successfully. Of course, no accountant should attempt to certify to the amount which will be receivable in any future period, or as to the amount of expenditures which will be required to produce a given amount of revenue. Nor is any officer or manager of the business qualified to make such a prophecy. The preparation of the budget involves obtaining the best estimates possible as to the probable future income and expenditures of the business. The opinion of one and another in the organization from sales manager, purchasing agent, plant managers, up to the president and possibly the chairman of the board, should be brought to bear on the preparation of the budget. Yet time after time I have seen these various opinions, each one perhaps the best obtainable within its particular sphere, brought together into a budget the results of which were, however, erroneous because of accounting errors.

We can not have proper budgets without the correct application of accounting principles. Accordingly, budgeting will fail without accountancy. This does not mean that the accountant will endeavor to substitute an accounting knowledge or his reading of the accounts of the past in place of the practical judgment of those better qualified than he is to judge of the probable future event. It does mean, however, that there is need for the accountant to see that others in applying their practical judgments have not based them on erroneous conceptions of the meaning of past accounts and that they are not making accounting errors in endeavoring to express their judgments as part of a budget accounting statement.

I quite agree that the expression "in my opinion" is not sufficient to safeguard an accountant if he attempts to predict the unknowable future. The accountant is only justified in stating an opinion if and to the extent that he has a reasonable basis for forming such an opinion. I think any accountant who will sit down and carefully set forth in writing what he can say is his matured opinion, so far as he can express an opinion regarding any budget, will not go far wrong and will not be in danger of entering the field of prophecy. I think if he does endeavor thus to express in writing his opinion he will find that it will come down to the fact that, based on the opinions expressed by those officers or employees of the company which have been furnished to him and based on his knowledge or examination of the accounts of prior years (and probably with an assumption that existing conditions, prices, etc., will continue as at present or will improve or grow worse) he believes that the proposed budget is a reasonable program for future operations. Each case would, of course, have its own special circumstances and qualifications to be taken into account, but in any case I think there will be found no reason for confusion between the accountant's work and presentation applicable to a budget statement and that applicable to a statement of past transactions and condition.

We certainly should avoid any thought that we as accountants are attempting to prophesy as to the future. It is because I believe this that I have so strongly opposed any thought that accountants on the balance-sheet should be considered as endeavoring to predict the probable realizable value of the assets there stated. Yet I believe that the accountant, without any attempt to prophesy, may properly participate in the preparation of budget statements which represent the accounting assemblage of estimates or authorizations for the future, and in so far as he has a real opinion to express with regard to such statements he may properly express it, but in such a way as will leave no good ground for misunderstanding or misconception as to what is his opinion and in such a way as will not leave him open to the charge of indulging in prophecy.

I think, therefore, it is a mistake to speak of accountancy and accountants as dealing only with the past. There is need for accountancy as applied to the future, and that need is recognized both by the professional accountants and by the business world. We can and should try to meet that need but without attempting to engage in prophecy and without stating opinions which will be misleading or will put us in any unprofessional position.

Yours truly,

HENRY B. FERNALD

New York, August 9, 1934.

[There is really no difference of opinion between this magazine and Mr. Fernald. There is a slight difference in interpretation of the word "accountancy." The word was employed in the notes of August, 1934, to indicate merely the science of accountancy of which, we insist, facts are the basis; and this Mr. Fernald recognizes when he states: "Of course, no accountant should attempt to certify to the amount which will be receivable in any future period or as to the amount of expenditures which will be required to produce a given amount of revenue. Nor is any officer or manager of the business qualified to make such a prophecy."

To include budget making and other extensions of the accountant's function as a part of true accountancy is, in our conception, unjustified. In such matters, as we said in August, the accountant is more a business counsellor—and doubtless a valuable one.

Again, as Mr. Fernald points out, "If he does endeavor thus to express in writing his opinion he will find that it will come down to the fact that, based on the opinions expressed by those officers or employees of the company which have been furnished to him and based on his knowledge or examination of the accounts of prior years (and probably with an assumption that existing conditions, prices, etc., will continue as at present or will improve or grow worse) he believes that the proposed budget is a reasonable program for future operations."—EDITOR.]

Book Reviews

COST ACCOUNTING FOR CONTROL, by THOMAS HENRY SANDERS, *McGraw-Hill Book Co., Inc.*, New York. 2nd edition. Cloth, 518 pages. 1934.

In *Cost Accounting for Control* Dr. Sanders offers as a text-book for students (primarily of Harvard University) of cost accounting a revised edition of his former book entitled *Industrial Accounting.* In the popular mind cost accounting has been regarded as peculiar to industrial enterprises, and the change in title is a recognition of the fact that in the last few years it has been extended to almost every form of business activity. Other changes consist mainly of new material in the way of exercises, quizzes, practice sets and a discussion of new problems presented by the N.R.A. Technical procedure is amply treated in part I, "Control through records," and part II, "The elements of cost." Part III considers typical cases of cost accounting and reports, while part IV treats of some special phases of cost work, such as the use of mechanical aids for records, the influence of trade and professional associations in establishing standards, etc. Examination and review questions and problems, some taken from examination papers of the American Institute, are found at the end of each chapter and are searching and well designed to test the students' understanding of the subjects.

As a whole the book is more than a mere treatise on the bookkeeping for cost accounting, the author throughout laying special stress of the basic point of view "that the meaning and uses of costs for management purposes are more important than matters of technical procedure." (p. v.)

Chapter XXV, "Costs and the governmental control of business," seems somewhat irrelevant in a text-book for students—it may be out of date in another year—but practising accountants will find it exceedingly interesting in its brief but comprehensive statement of the obstacles and pitfalls that await governmental control of business. Dr. Sanders is optimistic in his belief that they are not insurmountable, and that the solution of the many complications involved in administering the N.R.A. will be found in establishing proper and uniform systems of cost finding and report forms for each industry affected. Maybe so, but it will be a long drawn-out experiment and a costly one for business men and taxpayers alike. A pity that a reprint of this chapter could not be put in the hands of every member of the next congress so that he might realize what a burden to business a permanent N.R.A. would become!

In his discussions of depreciation as part of the burden to be included in standard costs Dr. Sanders is in the main in accord with orthodox and standard practice. But in two instances his departure from traditional principles is a bit startling, to say the least. As to the first, there is no principle better established and more firmly held by conservative accountants than that depreciation being steadily continuous must be provided for by a regular periodical allowance. Dr. Sanders says (p. 164): "This question will not be argued here; whether the reserves in the financial accounts are set up by regular annual instalments or by irregular amounts at the discretion of the management, they must be provided for, etc." One may conclude, therefore, that certified public accountants with Harvard training will feel at liberty to accept any depreciation charges approved by the management, however arbitrary and incorrect they may be.

The second instance is more involved and concerns the base value on which depreciation should be calculated, book cost or present replacement value of the plant and equipment. For good and valid reasons connected with equalizing basic conditions with competitors in the same class of industry, Dr. Sanders favors present replacement value as the base, and where it is necessary to "tie in" costs records with financial, he advises that the excess over that figured on book costs be "treated as an additional credit to profit and loss, like any other item of over-absorbed burden." (p. 202.)

This, of course, applies where the replacement value is more than the book cost and may be considered good practice in fixing standard costs and selling prices. Logically one would expect where the converse condition exists, as is so distressingly the case at present, that the excess of depreciation figured on book costs over that on replacement values would be treated as unabsorbed burden in the cost records as explained on pages 182–3. Instead of which Dr. Sanders merely notes that many concerns have written large amounts off their plant accounts for the purpose of showing balance-sheet values in line with current conditions, and also to relieve operating statements of heavy depreciation charges based on former high values; and he very rightly comments: "It must be noted that, though writing down the assets results in a conservative balance-sheet, the effect on the income statements of smaller depreciation charges is the opposite of conservative practice."

W. H. LAWTON

RETAIL ACCOUNTING, by CECIL K. LYANS and NORRIS A. BRISCO. *Prentice-Hall, Inc.*, New York. Cloth, 590 pages. 1934.

To quote from Dr. Lyans' preface, *Retail Accounting* "is the outgrowth of several years' teaching of retail accounting to college classes (i. e. at New York University). Its purpose is to fill the need for a usable text for such classes; and to present a detailed description of good accounting practice as it is found in retail stores, for the use of all those interested in this phase of the technique of retailing."

The basic principles of retail accounting are simple enough, but no accountant can wander about the great department stores without a feeling of wonder and admiration for the smooth running system that keeps correct records of the thousands of transactions taking place day by day. In this book of Drs. Lyans and Brisco the multitudinous details of such systems are described with a meticulous exactness that fairly makes the reviewer's head swim. How much of it remains in the heads of the students at the end of two semesters may be questioned, but at all events as a manual for active workers in our retail stores the book could hardly be bettered. It is practical rather than theoretical, as evidence of which the closing remark in Dr. Lyans' preface of his indebtedness to comments by students actively engaged in store accounting work is significant.

W. H. LAWTON

PRACTICAL BUSINESS STATISTICS, by FREDERICK E. CROXTON and DUDLEY J. COWDEN. *Prentice-Hall, Inc.* New York. 529 pages. 1934.

Upon perusal of the preface, the reader is at once favorably impressed by the modesty of the claims advanced in behalf of *Practical Business Statistics*.

The authors frankly admit that "little or nothing in this book is new in the way of method" and that "for the most part the conventional outlines are followed." They "have made no pretense to mathematical completeness" for their emphasis has been on application rather than theory.

The purpose of the volume is "to present to students who expect to enter business, the more elementary statistical procedures that may prove useful to them." It contains ample material for a one-year introductory course and may also be read with profit by the average accountant and business man.

The method of approach is logical and practical. Common pitfalls and misinterpretation of statistical data are illustrated in detail. A review of the principal business ratios contains at least one item to which accountants ought to give more attention. "Net profit on net worth" is mentioned in few accounting textbooks, although it is a more significant ratio than "earnings per share."

All of the twenty-one chapters are profusely illustrated by recent data obtained from a number of well-known business concerns, but it is regrettable that the table of contents does not include a list of the 136 charts and 93 tables presented. Among the topics discussed, index numbers appear to have received less than their due share of attention. Although the average length of a chapter is twenty-three pages, the construction of index numbers is dismissed in twelve. Some of Irving Fisher's contributions to the subject, especially the time and factor reversal tests, might have been briefly mentioned. On the other hand, seventeen pages are devoted to curvilinear and multiple curvilinear correlation, which is hardly an elementary topic nor one of great practical interest to laymen. Appendices covering forty-two pages consist mainly of aids to calculation, such as tables of logarithms, etc. A thirteen-page index closes the volume.

Practical Business Statistics may be recommended as one of many good books on elementary principles. It is readable and instructive to beginners.

GABRIEL A. D. PREINREICH

SECURITY ANALYSIS, by B. GRAHAM and D. L. DODD. *McGraw-Hill Book Co.* New York. 725 pages. 1934.

Had this book been written in 1928 it would have been a monument to the perspicacity of the authors, almost entitling them to a degree in clairvoyance; as it is, it is evidence of the authors' superior powers of observation. The lesson of the big "flop" in security values has been thoroughly studied by them, and their conclusions, which seem to me to be well founded and certainly are clearly and interestingly expressed, form the substance of this book.

That their vision of matters other than those made plain by past happenings has been limited is indicated by their failure to note the enormous transfer of values from bonds and preferred stocks to common stocks, which must eventually result from the debasement of our currency. It is true that up to this time the debasement has to only a limited extent been manifest in the price level within this country. We have almost lost our foreign trade, and dollar values among ourselves have not yet recognized fully the abstraction of nearly half of the base of the value of the currency. Such a realization must come, sooner if we again have to deal largely with other nations, but eventually, even if we do not regain our foreign trade. Americans living abroad feel it and bring back to this country, on their return, a more just estimate of the intrinsic value of a clipped dollar.

Apart from that omission the text is a complete guide to the investigation of security values, very well arranged. The impracticability of enforcing many of the provisions of indentures and agreements that purport to protect investors is well brought out; by investors it is not sufficiently considered. Generally, the authors have looked behind superficial appearances of security and give weighty reasons for qualifying severely assurances of safety that such agreements and indentures seem to offer.

In a book of this character the mental attitude of the writers is important. In this case it is indicated to some extent by the statement that for many years some investment houses "were able to combine successfully the somewhat discordant functions of protecting their clients' interests and making money for themselves." Academic writers too often assume that bankers are unscrupulous folk and that they propose to make money in the wild-cat manner, as and when they have a chance. That is hardly a fair attitude, for most bankers expect to make profits by establishing a satisfied clientele. Satisfying the client is not a discordant function but is the base of the bankers' prosperity. But perhaps a suspicious disposition is not a fault in a writer who would warn the common investor of his dangers.

Every investor will find something of value to him in this book; while it is largely hindsight, there are few of us gifted with the ability of these authors to read the lessons of the past.

F. W. THORNTON

Accounting Questions

[The questions and answers which appear in this section of THE JOURNAL OF ACCOUNTANCY have been received from the bureau of information conducted by the American Institute of Accountants. The questions have been asked and answered by members of the American Institute of Accountants who are practising accountants and are published here for general information. The executive committee of the American Institute of Accountants, in authorizing the publication of this matter, distinctly disclaims any responsibility for the views expressed. The answers given by those who reply are purely personal opinions. They are not in any sense an expression of the Institute nor of any committee of the Institute, but they are of value because they indicate the opinions held by competent members of the profession. The fact that many differences of opinion are expressed indicates the personal nature of the answers. The questions and answers selected for publication are those believed to be of general interest.—EDITOR.]

PROFITS ON SALES OF SECURITIES

Question: A corporation has sold securities and has shown a profit on these sales based upon the fact that it has identified certain securities as being the ones most recently purchased. On the basis of the actual facts, a profit is shown. If the average price of the securities in the portfolio had been used, however, the sale of the securities by the corporation would have shown a loss. My problem is to determine the correct accounting principle irrespective of the fact that the corporation sold securities identified as the most recently purchased, which cost, in this case, decidedly less than the average price of the security.

Answer No. 1: In our opinion the cost of sales of securities by the ordinary mercantile corporation should be based on the average cumulative cost of acquiring such securities. It would seem to us that the same principles of accounting would apply in the case of security acquisitions as are involved in the purchase of raw and other materials. While a corporation would have a perfect right to assume that securities sold have been disposed of in the order in which they have been purchased, thereby entitling them to use the same relative cost prices, it is recognized as a practical matter that when securities are accumulated at prices below those shown in respect of earlier acquisitions, the purpose of such later acquisitions is to reduce the average cost of the whole. It would seem illogical, therefore, as well as improper, to apply against the sales of securities the cost prices applicable to the shares most recently acquired.

In the case of investment trusts or corporations engaged primarily in the purchase and sale of securities, the above procedure might not be applicable. It would be necessary to know in precise detail the operating policies of such companies so far as they relate to dealings for or on behalf of clients.

In replying as above to your inquiry, we should like to point out, also, that when looked at from an income-tax standpoint an entirely different method of procedure might be justifiable or advisable.

Answer No. 2: Shares in a corporation represent ownership of a certain percentage of such corporation.

Acquisition of additional shares increases the proportion of the corporation owned and the total cost of such proportion.

Sale of some part of ownership necessitates a proportionate reduction in the cost.

It is our opinion, therefore, that correctly to account for the profit upon a sale of securities from a portfolio (it would seem of an investment trust) the cost of the securities sold should be the average cost of all such securities held and not the cost of the particular shares represented by the certificates delivered.

Should the accounting corporation insist on using the particular cost method in the accounts which it compiles, we conceive it to be the duty of the auditor to require the method of accounting to be stated in the accounts and make his report subject to such method, or he should include in his report a statement of the method and take exception to it.

ACCOUNTING FOR CREDIT FROM FORGIVENESS OF DEBT

Question: A corporation enters into a composition settlement with its creditors whereby it settles with cash and notes for fifty cents on the dollar.

This settlement represents obligations arising out of purchase of merchandise, borrowing of money and sundry expense items? The merchandise and expense items accrued both in the current and prior profit-and-loss period.

How should the amount of the forgiven debt be expressed with reference to the current profit-and-loss and to the surplus accounts? With respect to adjustments made in the surplus account should this appear as earned or special surplus?

Answer No. 1: It would seem obvious that any credit arising from such a transaction could have no relation to current profit-and-loss and it would also seem rather doubtful as an item of earned surplus available for dividends. What has happened is, in effect, not unlike the procedure so frequently met in the case of mining companies where capital stock is issued for mining claims or other property and a large part of such stock is donated to the company's treasury to be resold as a means of obtaining working capital. In this case the creditors make a donation of half their claims to enable the company to pay the other half and to save expenses of administration in receivership or bankruptcy. This, I would say, is the only legal motive for entering into such a settlement, and we must assume that the creditors are all acting legally. The credit, therefore, is a donated or capital surplus.

If the company has an earned surplus, which of course is unlikely, if a composition on a 50 per cent. basis is acceptable to creditors, the credit arising from the forgiveness of the debt should be kept as a separate item. If it were treated as earned surplus it would certainly be odd, to say the least, to see the payment of a dividend to stockholders taking place on the strength of a surplus donated by creditors. This condition, of course, is most unlikely to happen and would tend to indicate that the settlement was not made in good faith.

If the company has no earned surplus or a substantial deficit, which is probably the situation most likely to be found in such a case, there is some question as to whether it might be correct to apply so much of the surplus to the operating deficit as would extinguish it. In no case could any excess of this donated surplus over the operating deficit be considered as available for dividends. However, as the object of the composition is to allow the concern to continue in business and to start off with a clean slate, there is, I think, some ground for holding that the credit arising from the forgiveness of the amounts due creditors could be applied to the accumulated deficit to the extent required to extinguish such deficit.

I think it would be well to point out to your correspondent the rather unsavory implications of treating what is in effect surplus donated by creditors in such a manner as to make it available in any way or at any time for dividends to stockholders. This, I think, is particularly important as there is probably every reason to assume that some of the creditors agreeing to the composition settlement would, in all probability, continue to do business with the company after the settlement was carried out.

Answer No. 2: In our opinion, the difference between the corporation's liabilities and the amount of settlement represents an item of income of such extraordinary character that it should not appear in the current income account. However, we believe it should be credited to earned surplus or as an offset against the accumulated operating deficit account if the corporation had no net amount of earned surplus. Our opinion would be the same with regard to liabilities incurred during the period in which the composition settlement was made.

INTEREST PAID ON BONDS OR NOTES AS COST OF INVENTORY

Question: Why should not interest actually paid on bonds or notes be included in cost of inventory on the balance-sheet? (This has to do with the paragraph on page 10 of the *Verification of Financial Statements* which reads as follows: "That no selling expenses, interest charges, or administrative expenses are included in the factory overhead cost.")

Answer: Interest actually paid on bonds or notes is not to be included in cost of inventory on the balance-sheet because it forms no part of the cost of the inventory of goods. Of course, if interest on notes has been paid in advance, the unexpired portion of such interest may properly be included in the inventory.

The question infers that the inventory referred to is an inventory of goods. Interest on borrowed capital does not form a part of the cost of goods at any time. Some accountants try to include return on the investment as part of the cost of producing goods, but authorities generally agree that return on investment forms no part of the cost of the production and is calculated as part of the profit to be made, rather than a part of the cost.

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